Look-alikes handbook

Identification of similar native and weed species

HORNSBY
SHIRE COUNCIL

DEDICATION

This handbook is dedicated to the late Barbara Cush Bushcare volunteer and conservationist of the endangered Turpentine Ironbark Forest at Carrs Bush-Galston. If it wasn't for Barbara's keen interest, support, enthusiasm and persistence this handbook may have never been published.

The Bushland Community Programs team at Hornsby Shire Council has produced this publication for volunteers, students and the wider community.

Cover image - Native: Monkey Rope *Parsonsia Straminea*

This handbook can also be viewed at hornsby.nsw.gov.au/bushcare
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LOOK-ALIKES HANDBOOK

Native and Weed Identification Handbook

3rd Edition (2015)

INTRODUCTION

Many native plant species can appear very similar to exotic and weed species. This may be because of similar leaf shape, flower colour, fruit type or growth habit. While carrying out activities such as bush regeneration it can be easy to mistake these plants and remove the wrong ones.

To assist your identification skills, this handbook highlights the differences between similar looking native and exotic/weed plants found in the Sydney region. Use it to regenerate your bushland confident in the knowledge you are removing the correct plants. And remember, if in doubt, leave it until you can be sure.

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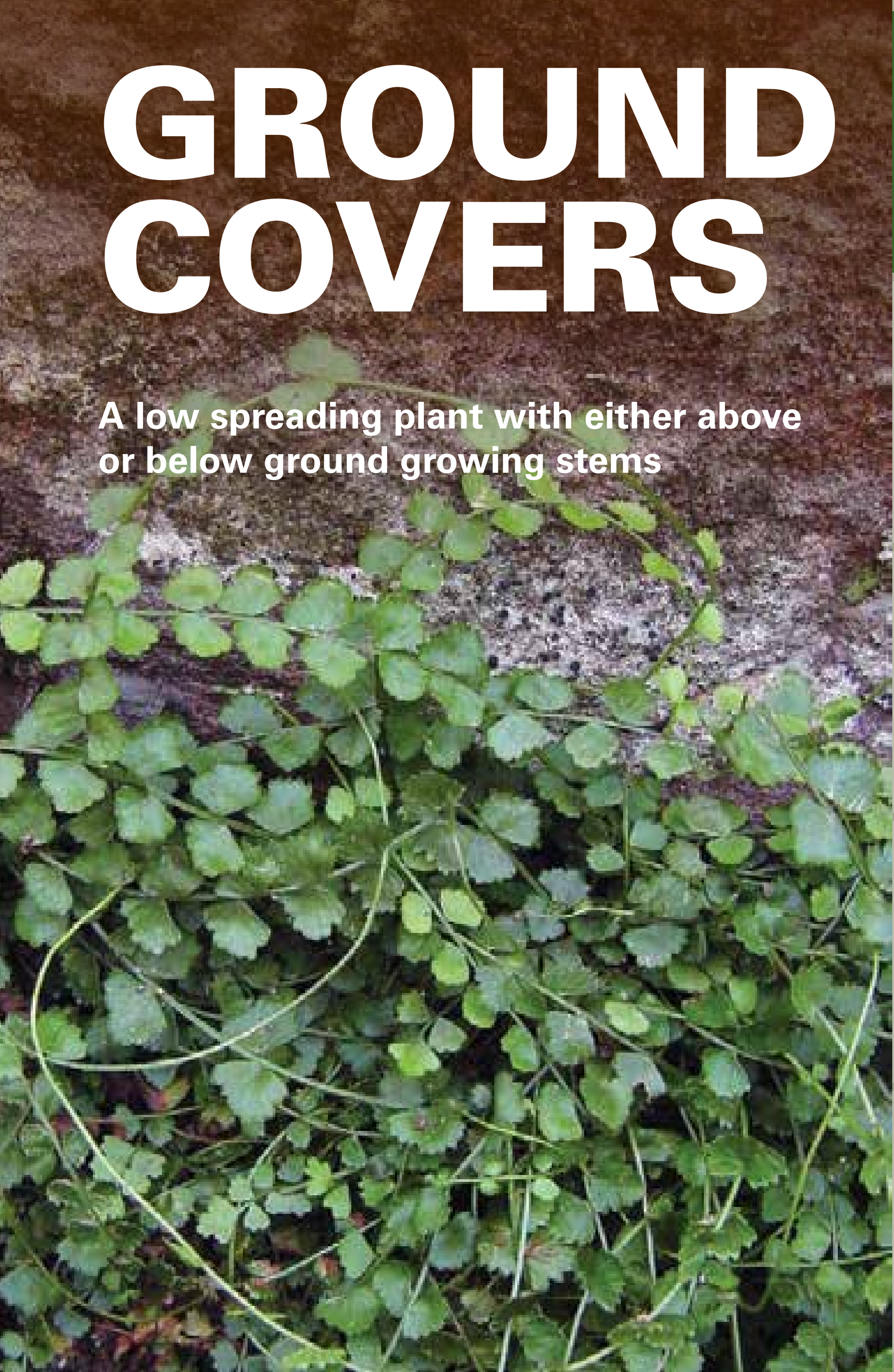
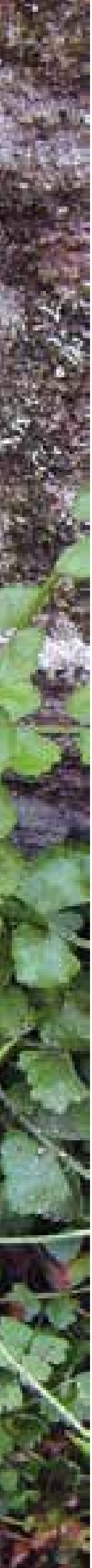
GROUND COVERS

A low spreading plant with either above or below ground growing stems

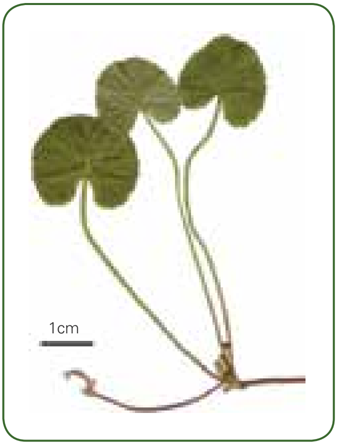




CENTELLA
AND PENNYWORT

NATIVE

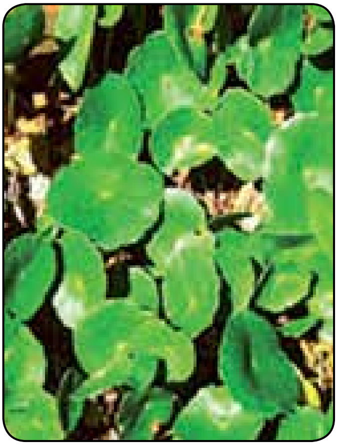
Name	Centella *(Centella asiatica)*
Family	Apiaceae
Habit	Creeping perennial herb.
Habitat	Found in moist shady areas in sclerophyll swamps on sandstone or shale soils.
Leaves	Leaf margins are serrated and leaves are fairly soft and dull.
Flowers	Flowers in Summer. Flowers are small red in colour.
Fruit/seed	Fruit is densely reticulate.



Native *Centella asiatica*

WEED

Name	Pennywort *(Hydrocotyle bonariensis)*
Family	Apiaceae
Habit	Grows vigorously. Is an invasive coloniser.
Habitat	Seaside sand dunes cliffs, estuaries, gardens and lawns. Grows in full sun or shade.
Leaves	Bright green, fleshy and circular with large rounded teeth on margins. Leaf is attached to the petiole at the centre of the leaf base and are hairless and very waxy on the surface.
Flowers	White to creamy yellow flowers. Flowers throughout the year especially Oct – Feb.
Fruit/seed	Dry fruit that splits into sections containing a single seed at maturity
Origin	South America



Weed Pennywort

Photo: Department of Agriculture NSW

DISTINCTIVE FEATURES

Centella: A distinctive feature is a sharp ‘V’ where the leaf joins the petiole.
Pennywort: If you crush its leaves it has a distinct smell, similar to mineral turpentine. The fruit of Centella is densely veined, distinguishing it from Hydrocotyle which has smooth, ribbed or warty fruit.

WEED REMOVAL

Difficult to remove. The waxy leaves do not absorb herbicide readily and the deep underground runners make it difficult to dig up. All methods of weed treatment require follow up.

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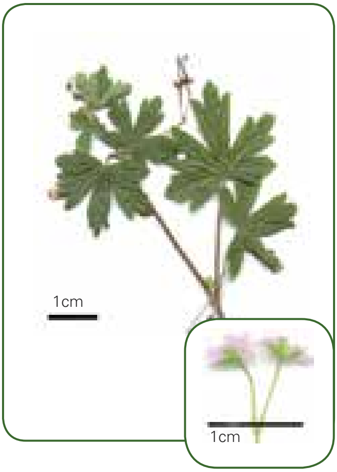
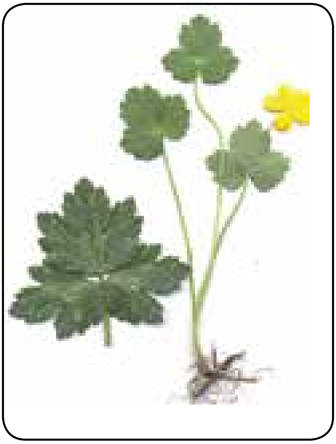
NORTHERN CRANESBILL

AND CREEPING BUTTERCUP



Native Northern Cranesbill



Weed Creeping Buttercup

NATIVE

Name	Northern Cranesbill or Native Geranium *(Geranium homeanum)*
Family	Geraniaceae
Habit	Sprawling herb with pink to red stems up to 50cm long.
Habitat	Common on clays soils on the Cumberland Plain and north of Sydney Harbour.
Leaves	Finely hairy and palmate.
Flowers	Pink, flowering from spring to summer.
Fruit/seed	Consists of a long beak which splits into five fruitlets.

WEED

Name	Creeping Buttercup *(Ranunculus repens)*
Family	Ranunculaceae
Habit	Creeping herb. This plant is a runner (like a strawberry) and spreads along stolons.
Habitat	Prefers moist, marshy soils, and tends to infest creek banks and swampy areas.
Leaves	Shiny and palmate with a prominent stalk.
Flowers	Bright yellow buttercup flowers.
Fruit/seed	A dry fruit with individually seeded parts. Spring to summer.
Origin	Europe, Asia and Africa.

DISTINCTIVE FEATURES

At the leaf base Creeping Buttercup often has black spots and the leaves may have patches of light and dark green.

WEED REMOVAL

The weed Creeping Buttercup can be removed by hand, gloves should be worn as a chemical in the leaves can cause skin irritation. It can re-sprout from its stolons so care must be made and follow up should be done on this weed. Follow up is always required.

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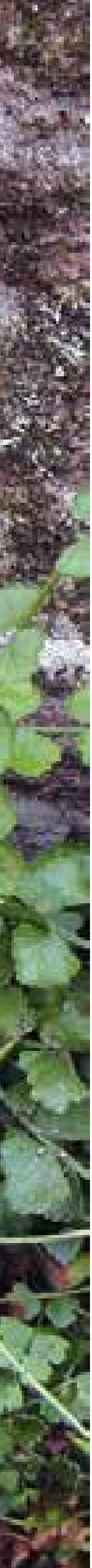
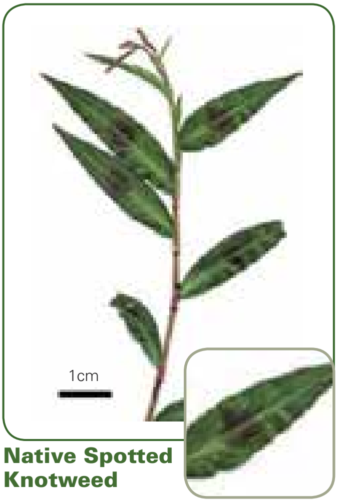


SPOTTED KNOTWEED
AND JAPANESE KNOTWEED

NATIVE

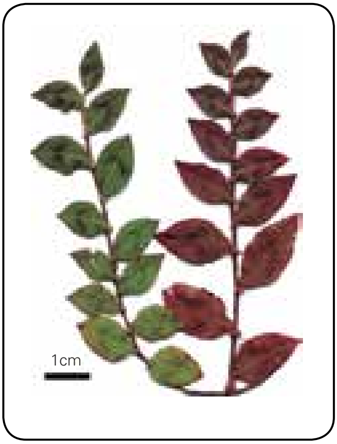
Name	Spotted Knotweed *(Persicaria decipiens)*
Family	Polygonaceae
Habit	Herbaceous annual which grows to 0.5 –1 metres
Habitat	Found along creeks or marshes.
Leaves	Are up to 10cm in length and often have a distinctive brown mark in the middle of the leaf.
Flowers	Long spike of small pink flowers.
Fruit/seed	Produce fine black seed.



Native Spotted Knotweed

WEED

Name	Japanese Knotweed *(Persicaria capitata)*
Family	Polygonaceae
Habit	Trailing and scrambling perennial herb to 50cm long.
Habitat	Grows out of rock shelves, rockeries and damp areas such as drain pipes.
Leaves	Alternate leaves, 6cm long with a mildly hairy margin. Generally pinkish, but sometimes green with a semicircular reddish brown band on its upper surface.
Flowers	Dense, round bright pink flower spikes Oct – Feb.
Fruit/seed	Produces a small brown nut.
Origin	Himalayas



Weed Japanese Knotweed

DISTINCTIVE FEATURES

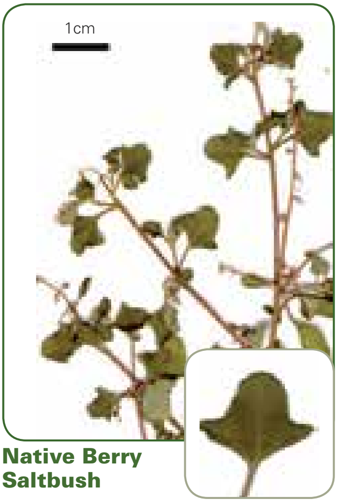
Japanese knotweed leaves are more ovate than the native *Persicaria* and the pink flowers are clustered in a ball. It also has a strong urine like odour.

Spotted knotweed is erect and freestanding in large colonies and requires moist environments for growth whereas Japanese knotweed scrambles along the ground and can cope with very dry conditions.

WEED REMOVAL

Japanese Knotweed is a hard weed to remove as the roots are often deeply embedded in rockeries (the most common habitat). Beware, some people are susceptible to skin irritations from this weed.

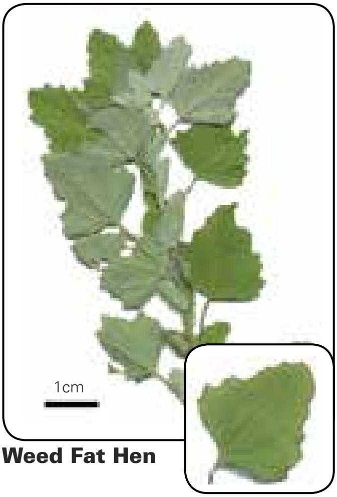
BERRY SALTBUSH
AND FAT HEN



Native Berry Saltbush

NATIVE

Name	Berry Saltbush *(Einadia hastata)*
Family	Chenopodiaceae
Habit	Herb that can grow to 50cm tall.
Habitat	Cumberland Plain, rainforests and gullies in good soils.
Leaves	Opposite, thin and soft. Have a blunt tip without serrations and often have a reddish edge, or white salt spots on the under-surface of the leaf.
Flowers	Tiny, yellow. Flowers during winter.
Fruit/seed	Small red berries that hold small black seeds that are easy to propagate.



Weed Fat Hen

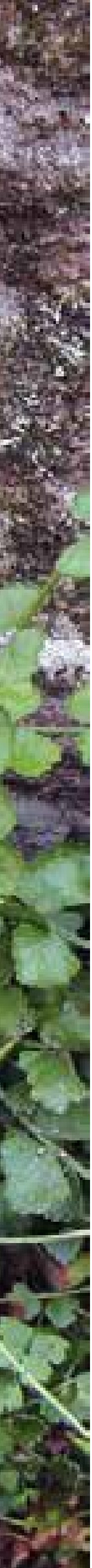
WEED

Name	Fat Hen *(Chenopodium album)*
Family	Chenopodiaceae
Habit	Shrub to 2 metres, with a thick green trunk.
Habitat	Wastelands, disturbed edges and pastures.
Leaves	Bluegreen in colour, mealy on its surface and ovate to wedge shaped. Leaf margin is coarsely toothed, except on upper leaves.
Flowers	Tiny, green to greyish in colour. Flowers summer to autumn.
Fruit/seed	Shiny, black, smooth seed within a membranous hairless fruit.
Origin	Europe and Asia.

DISTINCTIVE FEATURES

Fat Hen is an upright and tall plant where Berry Saltbush is low and bushy. Fat Hen prefers good balanced soils, and as such is a good indicator of soil health.

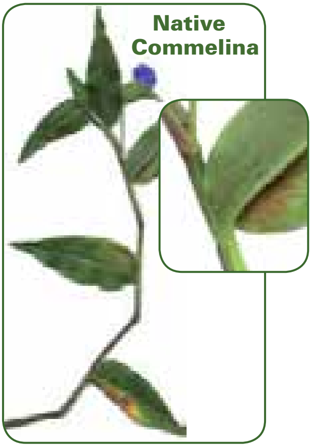
WEED REMOVAL



COMMELINA
AND TRAD

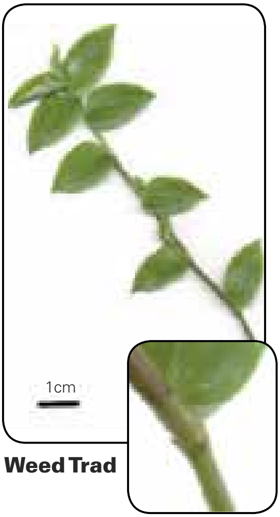
NATIVE

Name	Commelina or Scurvy Weed *(Commelina cyanea)*
Family	Commelinaceae
Habit	Sprawling native groundcover that can often appear weedy due to its abundance. Has a very tough root system and is much hardier than it appears.
Habitat	Moist nutrient rich areas and swampy zones.
Leaves	Sparsely spaced along the stem with wavy leaf margins. Leaf arises from an enclosed sheath.
Flowers	The name "cyanea" refers to its iridescent cyan or blue flowers. Flowers from spring to summer.
Fruit/seed	Capsule bearing 2-3 mm long seeds



WEED

Name	Trad *(Tradescantia fluminensis)*
Family	Commelinaceae
Habit	Perennial creeping herb to 30cm. Spreads vegetatively.
Habitat	Highly fertile moist soils often in sheltered areas, creeklines.
Leaves	Succulent dark green leaves. Hairless with purplish stems.
Flowers	White flowers (do not produce viable seed in Australia).
Fruit/seed	Is a capsule containing six seeds.
Origin	South America



Weed Trad

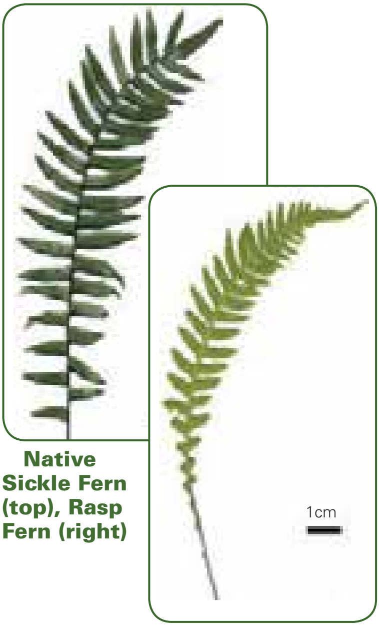
DISTINCTIVE FEATURES

The leaf sheath found in *Commelina* is not found in the weed Trad. Commelina has blue flowers as opposed to Trad which has white flowers.

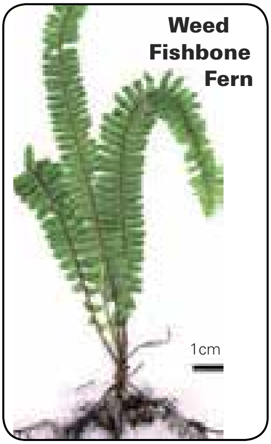
WEED REMOVAL

When removing Trad by hand it is important to remove all pieces of stem in the soil, otherwise it can grow back very easily from a small piece. When found growing along creeklines, it is better to remove small mosaic patches over time and soil stabilisation must be put in place. Consideration of erosion and habitat for fauna (such as frogs, lizards and insects) must be applied. The preferred method in more accessible areas is hand weeding. This can involve the use of a rake to collect the bulk of it followed by hand weeding. The unwanted vegetation can be easily placed into a compost bin and composted into good soil in a year. Poultry also enjoy eating this weed.

SICKLE FERN, RASP FERN
AND FISHBONE FERN



Native Sickle Fern (top), Rasp Fern (right)



NATIVES

Name	Sickle Fern *(Pellaea falcata)*
Family	Sinopteridaceae
Habit	Fern to 60 cm tall. It grows from runners and it has distinctive black wiry stems.
Habitat	Common in rainforest and open forests.
Leaves	Fronds are light green with tough shiny leaves.

NATIVE

Name	Rasp Fern *(Doodia aspera)*
Family	Blechnaceae
Habit	Grows to 40cm high, erect with rough slightly serrated harsh fronds.
Habitat	Grows in colonies in shady places, gullies and rainforests.
Leaves	New fronds are pink to green in colour.

WEED

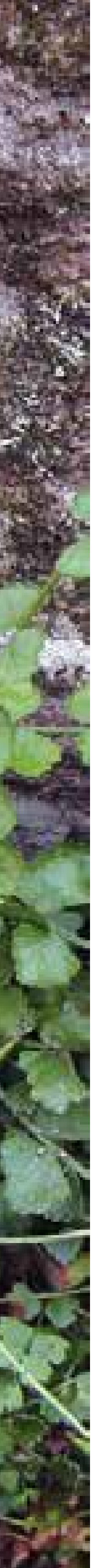
Name	Fishbone Fern *(Nephrolepis cordifolia)*
Family	Davalliaceae
Habit	Fronds grow from erect rhizomes and wiry stolons with globe shaped tubers.
Leaves	Has pale green fronds. Leaflets are alternate and overlap up the stolon. The stem is quite brittle and light in colour which can sometimes be covered in rust coloured hairs.
Origin	Northern Coast of NSW, Queensland and the Northern Territory.

DISTINCTIVE FEATURES

Rasp fern has pink-red new fronds. Fishbone fern has underground water storage tubers where the other two do not.

WEED REMOVAL

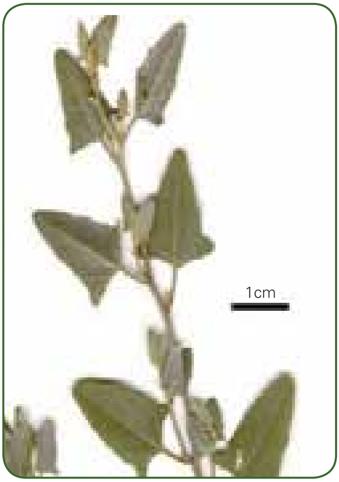
Note the tubers with small pieces of rhizome attached may re-shoot if left in the ground. A persistent species that requires follow up.



FISHWEED
AND HASTATE ORACHE

NATIVE

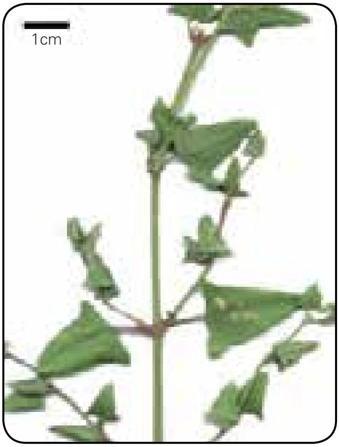
Name	Fishweed *(Einadia trigonos)*
Family	Chenopodiaceae
Habit	Small perennial trailing herb with slender stems usually 40cm long. A creeper that spreads along the ground from its root base.
Habitat	Along the coast, on forest floors on richer soils and along swamp margins.
Leaves	Triangular 10-35mm long, hairless, grey green and slightly mealy underneath. The leaves are arranged alternately along the stem.
Flowers	Flowers in autumn
Fruit/seed	Dry, loose fruit containing one seed



Native Fishweed

WEED

Name	Hastate Orache or Saltbush *(Atriplex prostrata)*
Habit	Upright annual growing to 80cm
Habitat	Grows most commonly on salty soil, estuaries and salt marshes.
Leaves	The leaves are blue green.
Flowers	Small and red and bloom in summer.
Fruit/seed	Broad, triangular dark green fruiting bracteoles with brown or black circular flattened seeds.
Origin	Europe and Asia.



Weed Hastate Orache

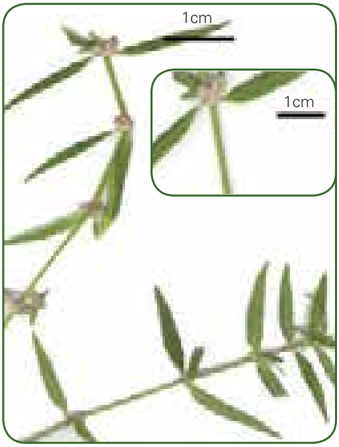
DISTINCTIVE FEATURES

The weed *Atriplex prostrata* has similar features to the native *Einadia* but has opposite leaves rather than alternate. There is also a less common native in the Sydney region *Atriplex australasica* which looks similar to the weed.

WEED REMOVAL

It is very easy to pull out the weed *Atriplex prostrata*, but make sure that it is the weed. Check for opposite leaves and erect growth.

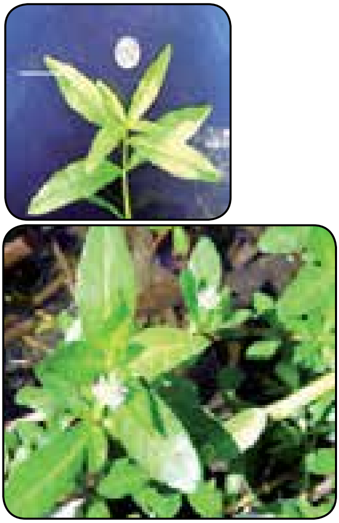
LESSER JOYWEED
AND ALLIGATOR WEED



Native Lesser Joyweed

NATIVE

Name	Lesser Joyweed *(Alternanthera denticulata)*
Family	Amaranthaceae
Habit	Sprawling herb. Grows as a creeper to about 10cm in height and runs to about 30cm along the ground.
Habitat	Marshy, boggy or moist areas, especially on the Cumberland Plain.
Leaves	Opposite
Flowers	Papery white or pinkish stalkless flowers arising from the base of the leaf at the axil. Flowers spring to summer.
Fruit/seed	Fruit is 1-1.5mm, flattened, broadly heart-shaped and does not open to release seed.



Weed Alligator Weed

WEED

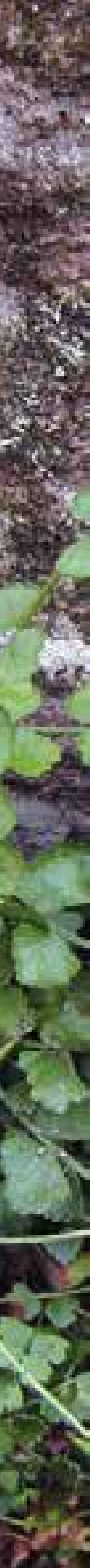
Name	Alligator weed *(Alternanthera philoxeroides)*
Family	Amaranthaceae
Habit	Perennial herb that grows near water. Grows vigorously and can form mats that spread across waterways smothering aquatic life and wetland habitats. It can also halt river flow.
Habitat	Roots alongside waterways (preferably fresh water although can tolerate some salinity).
Leaves	Opposite and in pairs. Slightly fleshy with a waxy surface.
Flowers	White, papery. Each flower is a spherical head 1cm in diameter and arises from the tip of the stems (not from the leaf bases).
Fruit/seed	Does not produce seed in Australia but reproduces vegatatively from broken pieces of stem.
Origin	South America

DISTINCTIVE FEATURES

The native is often mistaken for the noxious Alligator weed, although it is less vigorous and much less conspicuous. It has obvious differences to the weed in that the flowers are stalkless and arise from leaf axil and the leaves are much longer and thinner.

WEED REMOVAL

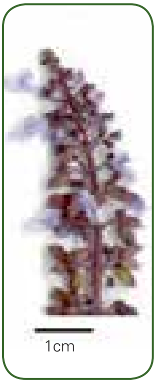
If you discover this weed it is best to contact your local Council. They will then initiate eradication.



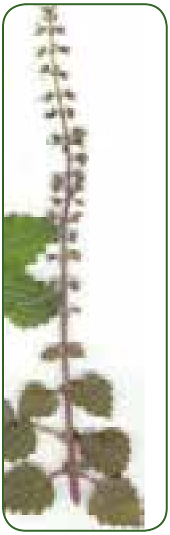
PLECTRANTHUS
AND BRAZILIAN COLEUS

NATIVE

Name:	Plectranthus or Cockspur flower *(Plectranthus parviflorus)*
Family:	Lamiaceae
Habit:	Perennial herb 30-60cm tall. It is hardy and reproduces by vegetative means and seed.
Habitat:	Found in moist sheltered areas, parrticularly creek lines on rich soil.
Leaves:	Soft dull toothed leaves along the stem.
Flowers:	Produces lilac sweet smelling flowers all year.
Fruit/Seed:	Dry fruit 4-5mm long. Four seeds per fruit.

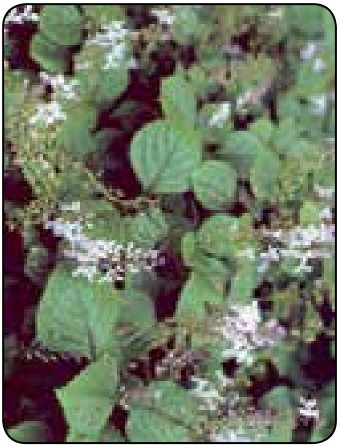


Native *Plectranthus parviflorus*



WEED

Name:	Brazilian Coleus *(Plectranthus oertendahlii)*
Family:	Lamiaceae
Habit:	Trailing groundcover which spreads quickly through bushland.
Habitat:	Prefers similar shaded habitats to the native *Plectranthus*. Tolerant of drought and dry conditions.
Leaves:	Succulent, thick leaves with silvery veins which are slightly shiny and have hairs but with hairless stems.
Flowers:	Spears of small, white, two-lipped flowers. Flowers in Autumn
Fruit/seed:	Small brown nutlets held in the calyx which remains once the flowers have dropped.
Origin:	South Africa. Was introduced as a garden succulent.



Weed Brazilian Coleus

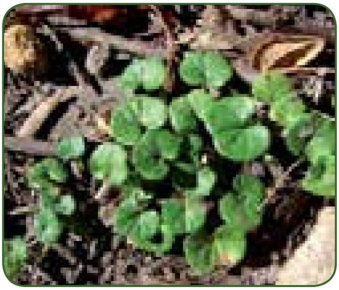
DISTINCTIVE FEATURES

The native *Plectranthus* has a menthol-like smell when crushed and has quite hairy stems and soft dull toothed leaves. The weed has more succulent thick leaves which are slightly shiny and which have hairs but with hairless stems. The weed also has similar flowers to the native, though mostly white in colour. The native is a fast spreading plant that was crushed by Aboriginal people into a medicinal poultice.

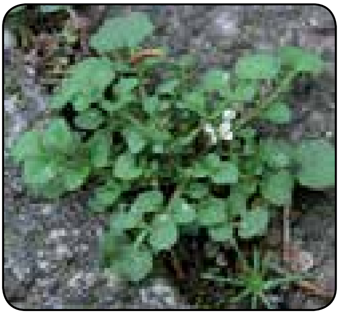
WEED REMOVAL

Small pieces of this weed left in the soil will regrow. Any parts should be bagged and follow up should be done to prevent the re- emergence of this weed.

KIDNEY WEED
AND COMMON BITTERCRESS



Native Kidney Weed



Weed Common Bittercress

NATIVE

Name: Kidney Weed *(Dichondra repens)*

Habit: Widespread native groundcover. It creeps along the ground, rooting at the nodes and becomes dense and compact when frequently mown.

Habitat: Found growing in woodland, grassland and in lawns.

Leaves: The leaves, as the name suggests, are kidney-shaped and sparsely covered with hairs.

Flowers: Solitary pale greenish yellow flowers. Flowers year round but mainly in spring-summer.

Fruit/Seed: Two lobed capsule

WEED

Name: Common Bittercress, Flickweed *(Cardamine hirsuta)*

Habit: Slender annual herb growing to 35cm

Habitat: Widespread weed inhabiting most gardens and lawns.

Leaves: Thin, sparsely hairy and form a rosette at the base.

Flowers: White with petals around 3mm long.

Fruit/seed: Thin fruit stands erect on the stem and when ripe ejects the seed a considerable distance, giving the plant its other name 'Flickweed'.

Origin: Europe

DISTINCTIVE FEATURES

Kidney Weed may be confused with juvenile Common Bittercress as they have similar leaf shapes and inhabit the same kinds of areas. Perhaps the best way to distinguish them is by observing the 'rosette' formation of the Common Bittercress as opposed to the native's creeping nature.

WEED REMOVAL

Because it is an annual, the most effective way of controlling Common Bittercress is to remove it before it goes to seed. Note: there are also Cardamine such as *Cardamine paucijuga* which is commonly confused with *C. hirsuta.*

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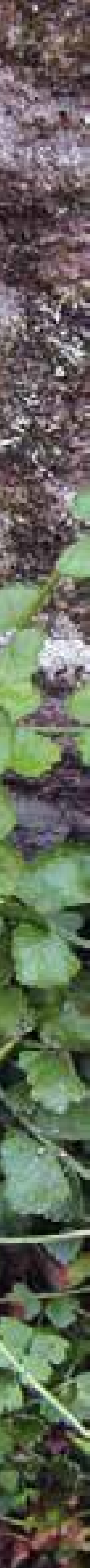


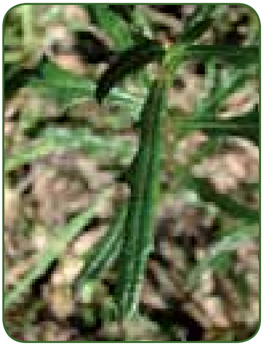
ROUGH GROUNDSEL
AND FIREWEED

NATIVE

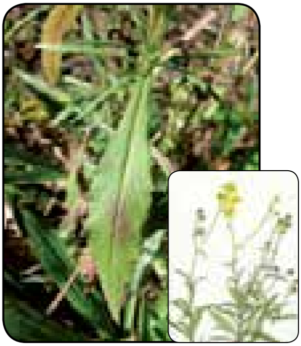
Name	Rough Groundsel *(Senecio hispidulus)* (Although there are several different native Fireweed species in the area, this is perhaps the most common).
Family	Asteraceae
Habit	Erect herb that can reach 1m.
Habitat	Often found in moist sunny environments.
Leaves	Grow up to 8 cm, can be narrow and toothed or deeply divided and have small hard hairs making them rough to the touch.
Flowers	Bright yellow flowers appear through most of the year.
Fruit/seed	Seed 1.5-3mm long with a cover of 5mm long hairs which help disperse the seed.

WEED

Name	Fireweed *(Senecio madagascariensis)*
Family	Asteraceae
Habit	Grows to a height of 60cm. An opportunistic and hardy plant.
Habitat	Can be found in almost any sunny, disturbed location and has been declared a pastureland pest as it is toxic to cattle and horses.
Leaves	Can be quite variable in shape and size, though often they are narrow, soft and toothed, and can grow up to 7cm in length.
Flowers	The bright yellow flowers appear through most of the year.
Fruit/seed	Seed 1.5-2.5mm long with cover of 5mm long hairs.
Origin	South Africa.



Native Rough Groundsel



Weed Fireweed

DISTINCTIVE FEATURES

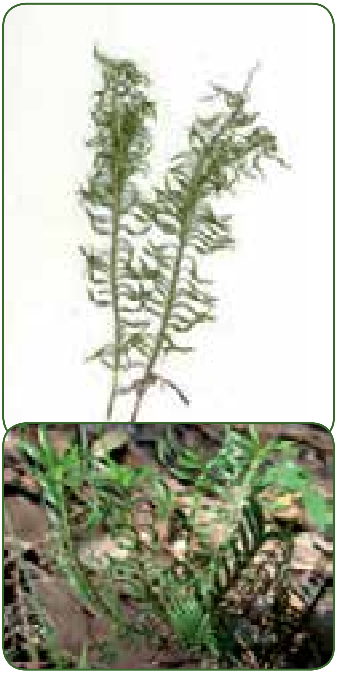
The native Fireweed can easily be confused with the weed species due to their similar appearance and growing environment. Both belong to the Asteraceae family and appear in disturbed areas, especially after fires. A useful way to distinguish between the two species is to feel the leaves. The native leaf is thicker and rough to the touch; the weed leaf is softer and smooth. The weed usually has many more stems and flowers than the native and will often be found along fire trails and roadways. The native is less prolific and will usually only pop up after fires or at the site of a pile burn. Weed flowers are ray and disc shaped while the native has disc flowers only.

WEED REMOVAL

The plant can be biennial and continually produces flowers throughout the year, so de-seeding is not always a viable long term option. It is important to remove all seeding and flowering parts from the site as seeds can continue to mature after the plant has died.

FISH BONES LOMANDRA

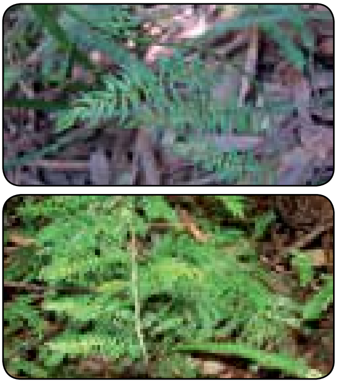
AND ASPARAGUS FERN



Native Fish Bones Lomandra

NATIVE

Name	Fish Bones Lomandra *(Lomandra obliqua)*
Habit	A small, stiff, sprawling herb.
Habitat	Commonly found in heath and eucalypt woodland and forest on shallow sandy soil and rocky slopes.
Leaves	Many-branched stems are lined with ranks of flat, twisted leaves up to 4cm long and 2 mm wide.
Flowers	Yellow, flushed with purple. Male and female flowers on separate plants with male flowers displayed on the end of foliage while the female flowers in tight clustered ball.
Fruit/seed	Only appears on female plants and similar in appearance to the flower.



Weed Asparagus Fern

WEED

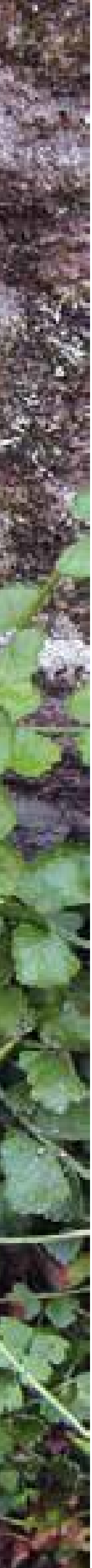
Name	Asparagus Fern *(Asparagus scandens)* also called climbing asparagus
Habit	This asparagus can climb up to 2m
Habitat	Commonly found in gully areas, and is a common garden escape.
Leaves	Deep green, 5-15mm long and 1mm wide.
Flowers	White to pink.
Fruit/seed	Small orange-red berries
Origin	South Africa

DISTINCTIVE FEATURES

On first glance native *Lomadra obliqua* looks quite similar to the *Asparagus scandens*, however it is just the juvenile form or new leaves of the Asparagus that look similar to the native. The weed Asparagus can be distinguished by its habit of climbing, reaching up to 2m high.

WEED REMOVAL

Ensure any foliage with berries and the rhizome are disposed into a green waste bin as it will reshoot if left on site.



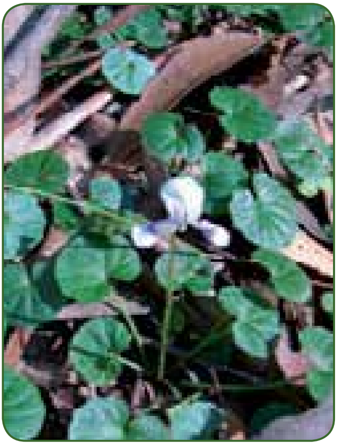
NATIVE VIOLET
AND SWEET VIOLET

NATIVE

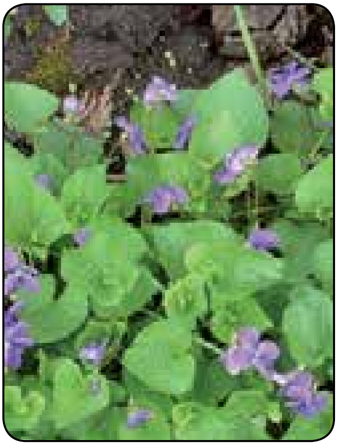
Name	Native Violet (*Viola hederacea)*
Habit	Creeping herb that forms carpets.
Habitat	Moist shady environments.
Leaves	Has short erect stems and leaves that reach 20mm by 30mm in size.
Flowers	White and mauve, on stems up to 6cm long. Flowers spring-summer.
Fruit/seed	Brown capsule

WEED

Name	Sweet violet *(Viola odorata)*
Habit	A slender, creeping herb
Habitat	Was widely cultivated in Sydney and can often be found as a weed in bushland edges and along creeks.
Leaves:	The oval or heart-shaped leaves reach 7cm long.
Flowers:	Are deep violet and white in colour. Fragrant. Appear in winter and spring.
Fruit/seed	7mm long capsule.
Origin	Europe, North Africa and the Middle East



Native Violet



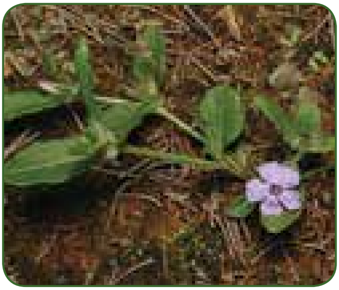
Weed Sweet Violet

DISTINCTIVE FEATURES

Several different forms of Native Violet grow in the Sydney region and can usually be obtained from nurseries. Beware of the Victorian form from nurseries. The Native Violet can be confused with the Sweet Violet largely due to similarities between their leaves and flowers. The Sweet Violet can easily be distinguished from the native because the leaves are much larger and of a different shape. The flowers are also much larger, deeper in colour and fragrant.

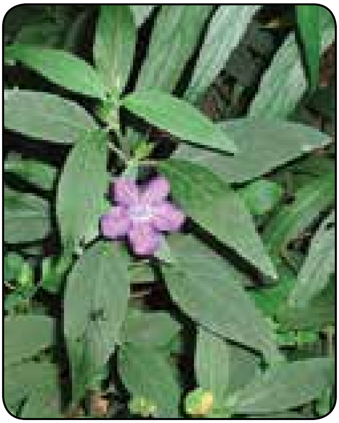
WEED REMOVAL

Sweet Violet can usually be removed quite easily by hand. It tends to grow in clumps and can be effectively eradicated from an area.



Native Blue Trumpet

Photo: © M.Fagg, Australian National Botanic Gardens



Weed Creeping Ruellia

Photo: Robert Whyte

BLUE TRUMPET
AND CREEPING RUELLIA

NATIVE

Name: Blue Trumpet *(Brunoniella australis)*
Family: Acanthaceae
Habit: Erect or prostrate herb growing to 2-15cm high.
Habitat: Grows in sclerophyll forest and woodland.
Leaves: Usually unequal leaves growing at each node.
Flowers: Appears September to June. Clusters of small and larger sessile blue flowers in leaf axils.
Fruit/Seed: Capsule 10-16mm long.

WEED

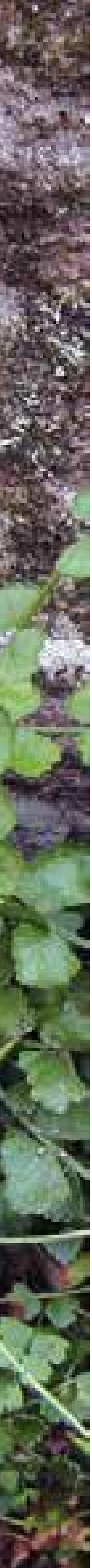
Name: Creeping Ruellia *(Ruellia squarrosa)*
Family: Acanthaceae
Habit: Sprawling perennial herb with branches to 60cm long which sucker.
Habitat: Commonly cultivated in gardens in Sydney, growing vigorously in drainage areas.
Leaves: Up to 6cm long and 2cm wide.
Flowers: Solitary blue inflorescence.
Fruit/seed: Long capsule to 15mm with 16-20 seeds.
Origin: Mexico

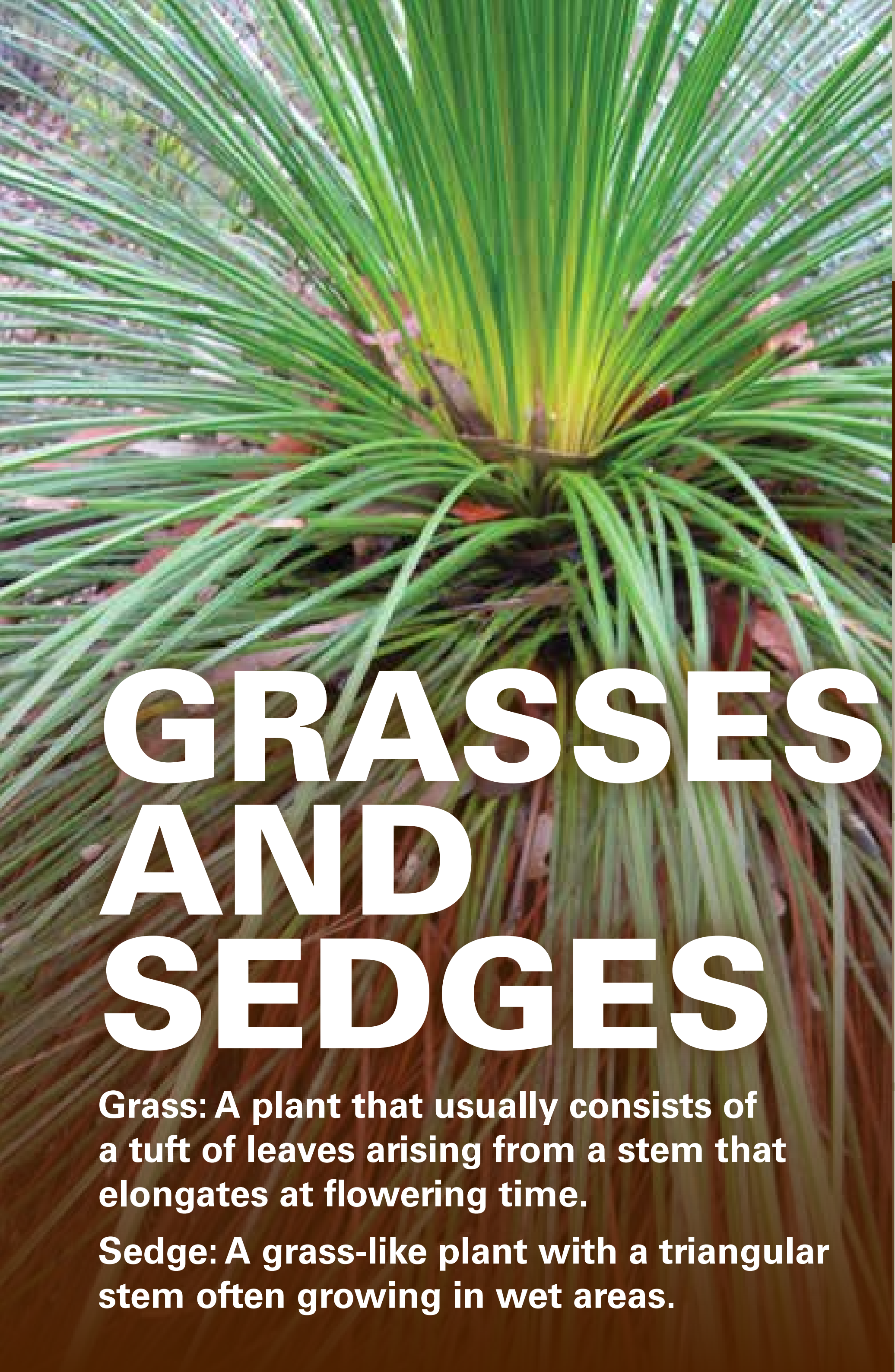
DISTINCTIVE FEATURES

Ruellia squarrosa has been mistakenly propagated and grown in the past in the belief it was the native *Brunoniella australis.* Although the flowers appear similar, *B. australis* produces clusters of flowers in the leaf axis while *R. squarrosa* produces a solitary flower in its inflorescence

WEED REMOVAL

Ruellia squarrosa has been found to spread rapidly and be extremely difficult to remove. It has been reported as naturalised in the Lane Cove area. Remove as many suckers as possible. Follow up will be required.

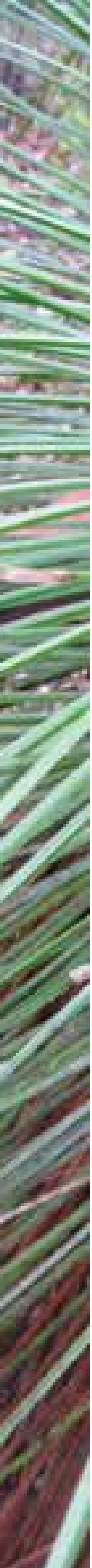




GRASSES AND SEDGES

Grass: A plant that usually consists of a tuft of leaves arising from a stem that elongates at flowering time.

Sedge: A grass-like plant with a triangular stem often growing in wet areas.

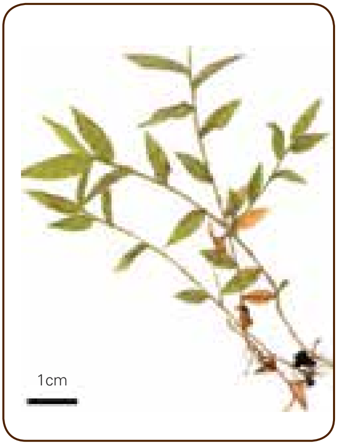


BASKET GRASS

AND TAHITIAN BRIDAL VEIL

NATIVE

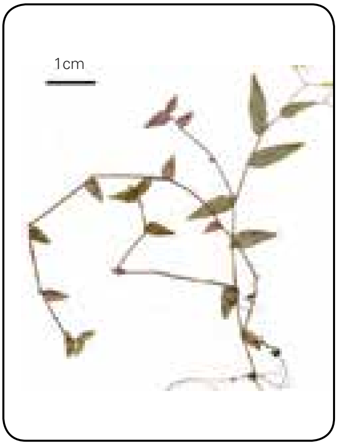
Name	Basket Grass *(Oplismenus imbecillis, O. aemulus)*
Family	Poaceae
Habit	Creeping grass
Habitat	Found in the Eastern and Northern States of Australia. It grows in moist areas to shady areas and can sometimes be found in full shade.
Leaves	Has low growing sprawling stems, with 1cm wide leaves. The leaves have wavy margins and fine hairs. *O. imbecillis* has longer narrower leaves than *O. aemulus.*
Flowers	Small red floral parts with a red awn atop a green grain.
Fruit/seed	Spreads vegetatively.



Native Basket Grass

WEED

Name	Tahitian Bridal Veil *(Gibasis pellucida syn. Tradescantia pellucida or T. multiflora)*
Family	Commelinaceae
Habit	A ground herb.
Habitat	Weed is a garden escape, mostly planted in gardens or used in hanging pots.
Leaves	Hairless with tiny, shiny leaves and wiry stems.
Flowers	It has small white flowers, which produce a fine 'veil'.
Fruit/seed	2.5mm ovoid capsules.
Origin	Mexico and Central America



Weed Tahitian Bridal Veil

DISTINCTIVE FEATURES

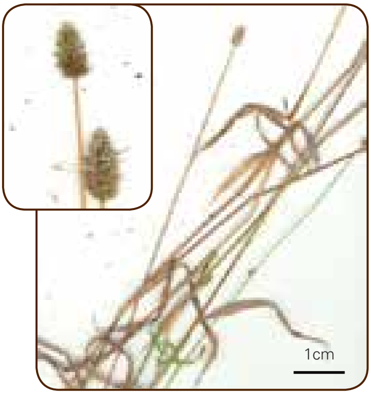
While Tahitian Bridal Veil is not particularly invasive it can be mistaken for a native. It looks and grows very much like a smaller version of the native Commelina. *O. imbecillis* and *O. aemulus* have small red flowers which appear in summer to autumn on short erect stems. In shady conditions when it is very humid and moist *Oplismenus* seed heads can be covered with powdery mildew giving them a white frosted appearance. This grass is very hardy and has an ornamental quality about it. It makes a great native lawn that can look very neat when mowed.

WEED REMOVAL

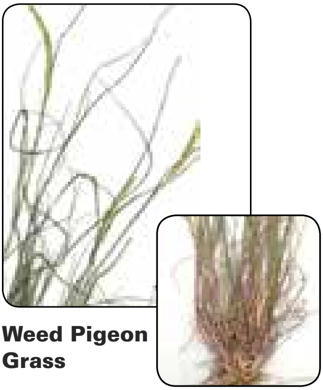
Be aware that nodes left in the ground will re-sprout.

HEDGEHOG GRASS

AND PIGEON GRASS



Native Hedgehog Grass



Weed Pigeon Grass

NATIVE

Name	Hedgehog grass *(Echinopogon ovatus, E. caespitosus)*
Family	Poaceae
Habit	Perennial grass to 1.2m high.
Habitat	Grows on rich soils in sunny or shady positions.
Leaves	Bright green and slightly hairy, short and membranous. The grass is rough and when touched with a downward action feels like it is sticking to you.
Flowers	Flowers in spring.
Fruit/Seed	Small 5mm long ovoid shaped seed heads that look like a small brush.

WEED

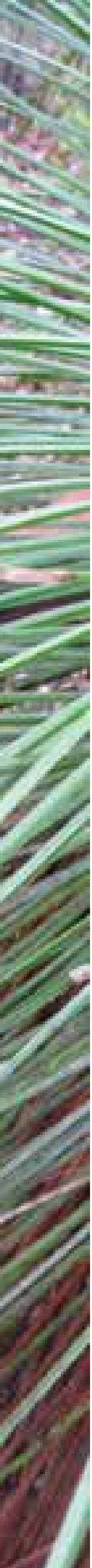
Name	Pigeon grass *(Setaria sp.)*
Family	Poaceae
Habit	Perennial grass up to 1m high.
Habitat	This grass can be found in disturbed sunny positions, along roadsides and along disturbed bushland edges.
Leaves	Leaf blade is often rolled or folded, and the leaf base can often be red. Sometimes the leaf base will break off where it meets the roots. This plant can also spread via rhizomes, in this form it can often die back in winter.
Flowers	Is a terminal panicle which is narrow, dense and spike like to around 3-5cm in length.
Fruit/seed	The seed is contained in the remains of the old flowers and when dispersed leaves behind the bristles of the seed head.
Origin	South Africa

DISTINCTIVE FEATURES

Setaria grasses are characterised by their stiff bristled seed head. Pigeon grass has quite large rounded seed that will drop off and the bristles remain. The seed on pigeon grass ripen late spring to summer. This grass is spread by wind, mud, animals and in feed. It germinates very easily, so needs careful treatment. *Echinopogan* is distinguishable by the small 5mm long ovoid shaped seed heads that look like a small brush. When it is not in seed though, the grass is fairly easily identified at 60-120cm tall, tufted with curled leaves around the base. Seed spreads via attachment to fur or clothing. Unfortunately Pigeon grass is also an important food source for a variety of birds including quails, lapwings, choughs, scrub-wrens and finches.

WEED REMOVAL

Removal ideal before the plant seeds (prior to spring).

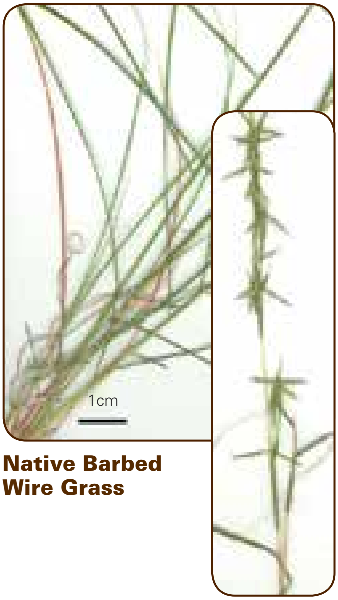


BARBED WIRE GRASS

AND WHISKY GRASS

NATIVE

Name	Barbed-wire grass *(Cymbopogon refractus)*
Habit	Perennial tufted grass with tall wiry stems to 1m high.
Habitat	Woodland areas on sandstone. Found in most parts of NSW, Qld, Vic and NT.
Leaves	Green, about 30cm long.
Flowers	Its inflorescence resembles the barbs of barbed-wire. This is due to the racemes which point downwards on maturity. Flowers mostly spring-autumn.
Fruit/Seed	Dry, one seeded.



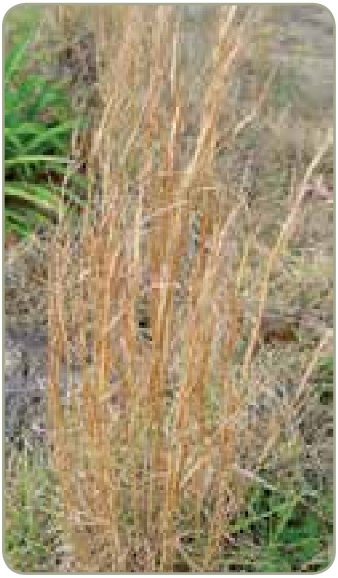
Native Barbed Wire Grass

WEED

Name	Whisky Grass *(Andropogon virginicus)*
Habit	Erect perennial grass to 1m tall
Habitat	Open sunny areas, roadsides, fire-trails, fields and other disturbed areas. It is common to Hawkesbury sandstone and other low nutrient soils.
Leaves	Leaf blades hairy near the base.
Flowers	Flowers 2-3cm long. Flowers in summer.
Fruit/seed	Seeds on a stalk up to 5mm long.
Origin	North America

DISTINCTIVE FEATURES

Barbed wire grass has an aromatic smell when crushed and it is interesting to know that the commonly used cooking herb, Lemon Grass *(Cymbopogon citratus)* and other Cymbopogons have a lemon scent to them. Whisky grass can be very invasive, and produces wind dispersed seed which can lie dormant in the soil throughout the winter. Whisky Grass can also look like the native Kangaroo grass *Themeda australis.*



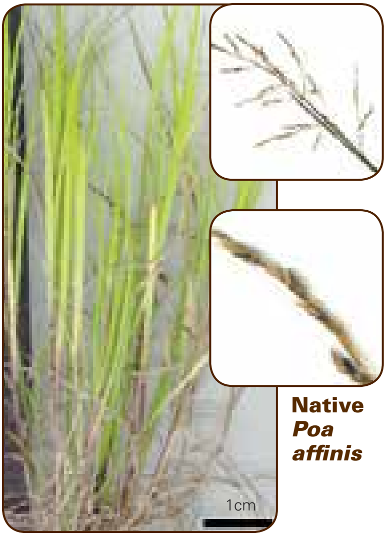
Weed Whisky Grass

WEED REMOVAL

It is important to remove this grass before it sets seed in spring. If the grass has fluffy seed in the tops these should be cut off and bagged before disposal.

POA AFFINIS

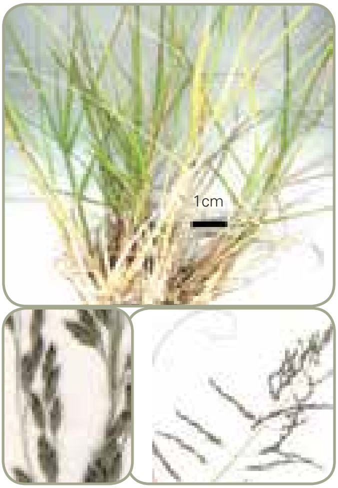
AND AFRICAN LOVE GRASS



Native *Poa affinis*

NATIVE

Name	*Poa affinis*
Habit	Loosely tufted with branched stems.
Habitat	Sydney, Blue Mountains. Widespread in the Hornsby area. It grows shaded hillsides and in the understorey of woodlands and forests primarily on sandstone soils.
Leaves	Soft light green leaves and a small blunt and membranous ligule.
Flowers	The inflorescence is a spreading open seed head with blue green spikelets made up of 2-4 florets. Flowers in late spring, early summer and can range from 60cm to 1.2m in height.
Fruit/seed	Straw coloured seed heads



Weed African Love Grass

WEED

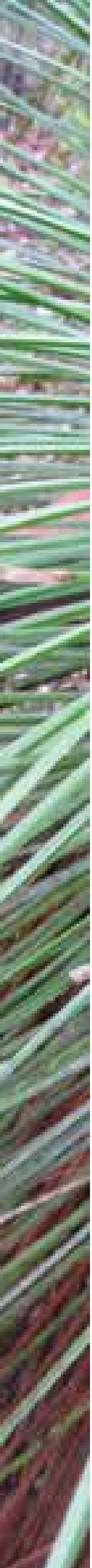
Name	African Lovegrass *(Eragrostis curvula)*
Habit	Robust, densely tufted perennial grass growing to 1-2m in height.
Habitat	Is very invasive and hardy growing particularly well along roadsides, railways, riverbanks and wastelands.
Leaves	Long stems with green to blue leaf blades. These are rough to touch and often arch and curl up to the tip (hence 'curvula'). The ligule has an inconspicuous ring of hairs enclosed by auricles (collar).
Flowers	Quite similar to the Poa, but has a dark olive-green spikelet consisting of 3-18 florets. Flowers in summer.
Fruit/seed	Flowering seed heads can be up to 30cm long.
Origin	South Africa

DISTINCTIVE FEATURES

The weed is quite similar to the native, but has a dark olive-green spikelet consisting of 3-18 florets as opposed to the blue-green spikelet of 2-4 florets of the Poa. Also, unlike Poa, African Lovegrass seeds are often subject to a black rust. The native Poa has a preference for shaded moist conditions where the African Lovegrass is highly tolerant of drought conditions.

WEED REMOVAL

Due to its matted root system, a mattock or lever would be most useful. As the native and weed look so similar check also for the spikelet colour and the distinctive curling of leaf blades on the weed before removal or spent inflorescences.

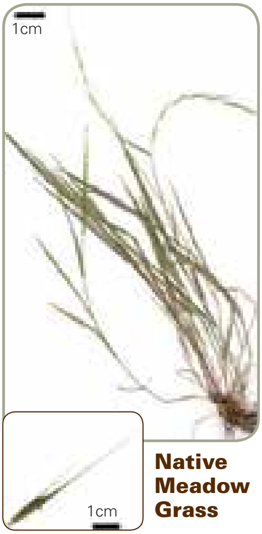


WEEPING MEADOW GRASS

AND PANIC VELDTGRASS

NATIVE

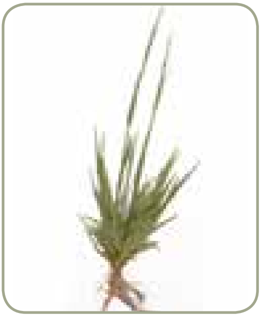
Name	Weeping Meadow grass *(Microlaena stipoides)*
Habit	Slender erect grass 15-70cm high.
Habitat	Grows widespread on sandstone and clay soils across Australia except N.T.
Leaves	Often has a bluish green tinge to its leaves which are short, flat and thin growing from tufts. The leaves can be smooth or sometimes hairy and the leaf tip has a small indent which is a good indication that it is the native.
Flowers	Flowers from late spring to autumn.
Fruit/Seed	Has a variety of forms but all with the same distinctive weeping seed head. Each seed has a spike attached to it that helps its distribution by getting caught on socks, clothes, fur and feathers etc. Has relatively large seeds, over 1cm.



Native Meadow Grass

WEED

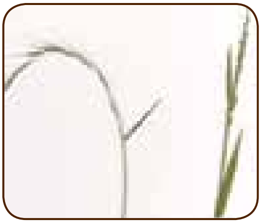
Name	Panic Veldtgrass *(Ehrharta erecta)*
Family	Poaceae
Habit	Can grow up to 60cm, although usually remains about 30cm tall. It spreads out from the root base allowing the seed heads to colonise new soil.
Habitat	Grows in sunny positions particularly in disturbed zones.
Leaves	Bright green leaves bordering on a green yellow in some situations.
Flowers	Flowers in spring and summer.
Fruit/seed	Seed head is erect, 6-20cm long. Seeds prolifically and sometimes year round.
Origin	South Africa



Weed Panic Veldtgrass

DISTINCTIVE FEATURES

Microlaena and *Ehrharta* have very different seed heads. *Microlaena* is weeping where the seed head on *Ehrharta* is erect. *Microlaena* leaves are generally rougher, thinner and darker green than *Ehrharta* which is a much brighter green to yellow green and wider. *Microlaena* can form clumped runners. At the margin between the leaf sheath and the leaf blade *Ehrharta* also has a ligule which is far less prominent in *Microlaena*.



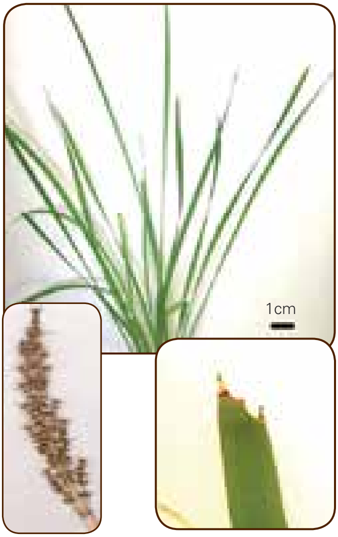
Seed Heads:
Microlaena (left) and Ehrharta (right).

WEED REMOVAL

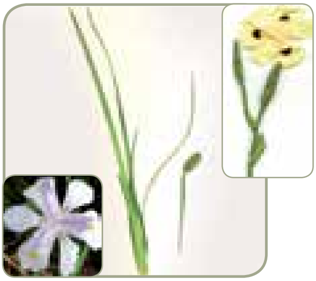
It is important to try to prevent it from seeding as it seeds prolifically especially in exposed areas. Ehrarta seed should be bagged for disposal or composted. Fortnightly follow up can achieve good results.

SPINY HEADED MAT RUSH

AND WILD IRIS



Native Spiny Headed Mat Rush



Weed Wild Iris

NATIVE

Name	Spiny Headed Mat Rush *(Lomandra longifolia)*
Family	Lomandraceae
Habit	Tufted, grass-like herb. Grows 50-100cm.
Habitat	Fairly common and grows in a wide range of habitats.
Leaves	Wide strap-like leaves usually around 50 cm long, which are distinguishable by their hairless, conspicuous marginal sclerenchyma bands. The leaf apex or tip of this native is 2 or 3 toothed, with the central tooth pronounced. There are a few different forms of the teeth and these are generally orange brown or reddish brown.
Flowers	The flower spike of *L. longifolia* stands shorter than the leaf blades reaching maximum 15cm long. Flower clusters are whorled up the prickly, branched inflorescence and appear yellow or cream. They have male and female plants distinguished by their flowers. Male flowers are shorter at 3.5mm, where the female are around 4.5mm long. Flowers in spring only.
Fruit/seed	Seeds like wheat grains. Easy propagation.

WEED

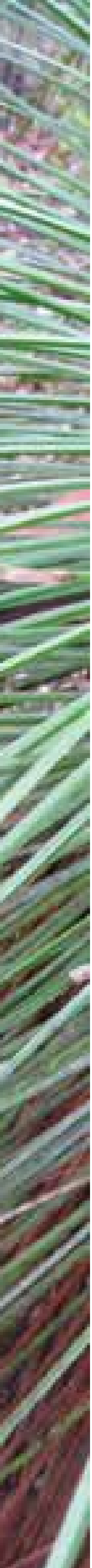
Name	Wild Iris *(Dietes grandiflora)*
Family	Iridaceae
Habit	Tufted herb
Habitat	Tolerant of poor dry soils and grows in a range of conditions.
Leaves	Long strappy leaves of about 50cm.
Flowers	White, yellow and mauve iris-like flowers appear in spring to summer.
Fruit/seed	Produces numerous 3 celled capsules. Abundant seed.
Origin	South Africa

DISTINCTIVE FEATURES

A distinguishing feature of *Lomandra longifolia* is its leaf tip. It has a prominent tooth or serration that is common to many Lomandra species. Lomandra is commonly used in roadside plantings around Sydney. Dietes is not a particularly invasive plant. Its seed head is very different to the Mat Rush. The leaves are shinier and slightly thinner with a pointed tip and no serration.

WEED REMOVAL

The *Dietes* is fairly easy to remove. Pull out any smaller *Dietes* by hand (check the tip if unsure. If there is no tooth and a flat base, it is the weed) and any larger clumps can be dug out with mattock. If this weed is not spreading vigourously and is providing habitat for small birds or lizards alternative control might be to simply collect and bag its seed head after it flowers. Dietes will re-shoot from any root stock left in the soil. It also produces abundant seed which can remain viable in the soil for an extended period of time.



BARBED WIRE GRASS

AND COOLATAI GRASS

NATIVE

Name	Barbed-wire grass *(Cymbopogon refractus)*
Habit	Perennial tufted grass with tall wiry stems to 1m high.
Habitat	Woodland areas on sandstone. Found in most parts of NSW, Qld, Vic and NT.
Leaves	Green and about 30cm long.
Flowers	Its inflorescence resembles the barbs of barbed wire. This is due to the racemes which point downwards on maturity. Flowers mostly spring-autumn.
Fruit/Seed	Dry, one seeded.

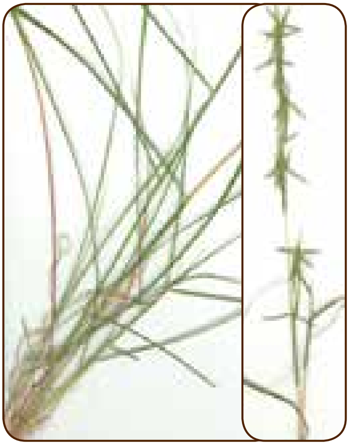
WEED

Name	Coolatai Grass *(Hyparrhenia hirta)*
Habit	Dense tussock to 150cm tall.
Habitat	Found in Hornsby Shire, along the northern NSW coast and Western Australia and grows along roadsides and in pastures.
Leaves	Greyish-green leaves that turn orangey-red in winter. Harsh to touch.
Flowers	Flowers year round. Has 5-13 awned spikelets with whitish hairs.
Fruit/seed	Has tall seed heads with paired racemes. Leafy bracts are a rusty brown colour.
Origin	Africa and the Mediterranean

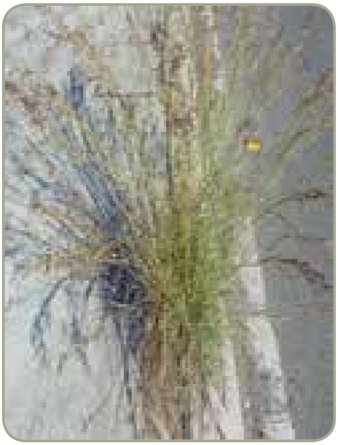
DISTINCTIVE FEATURES

Barbed wire grass has aromatic foliage. The leaves when crushed are lemon scented. It is interesting to know that the commonly used cooking herb, Lemon. Grass *(Cymbopogon citratus)* and other *Cymbopogon sp.* all have a lemon scent to them. It is very difficult to distinguish Coolatai grass from the native grass except that it has no distinct smell when crushed and the spikelets are often paired.

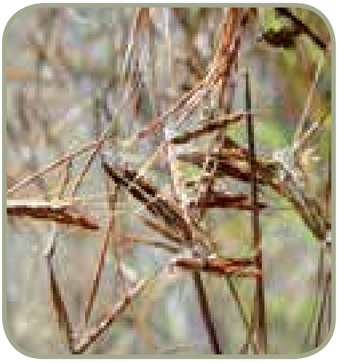
WEED REMOVAL



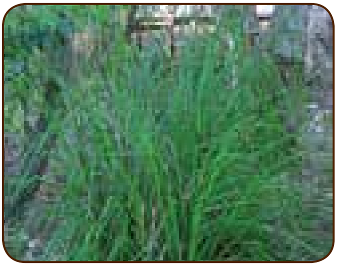
Native Barbed Wire Grass

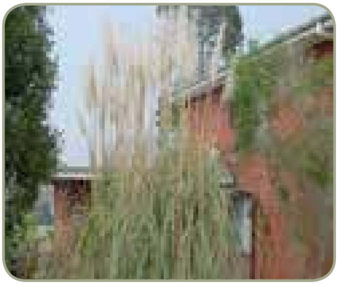


Weed Coolatai Grass



SAW SEDGE
AND PAMPAS GRASS


Native Saw Sedge


Weed Pampas Grass

NATIVE

Name	Saw Sedge *(Gahnia sp.)*
Family	Cyperaceae
Habit	Grows to 2.5 metres.
Habitat	Sedge found in a wide range of areas. Some species grow on creek edges, in swamp pockets of forests and some prefer salty soils.
Leaves	Glossy green, linear to drooping and have small serrations along them as described in their name.
Flowers	High flowering spikes that produce small nuts (1.5-5.5mm) which are red/brown. It flowers between spring and summer. Flowers are insignificant.
Fruit/Seed	A nut of between 2.5-6mm and variously straw, brown, black or red in colour depending on the species.

WEED

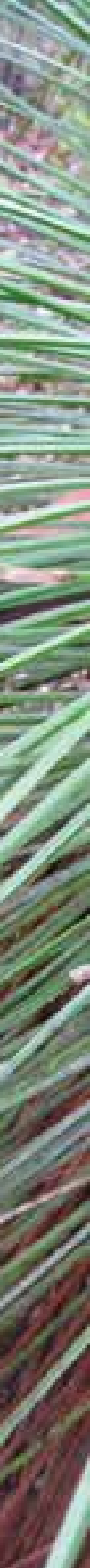
Name	Pampas Grass *(Cortaderia selloana)*
Family	Poaceae
Habit	Dense tussocky perennial grass that can grow up to 3 metres.
Habitat	Grows across a wide variety of environments with a preference for sunny open conditions, although grows well in moist areas and can be found along rivers and drainage lines and in disturbed heathland.
Leaves	The leaves, like the *Gahnia*, have silica serrations which are bluish green in colour. Often the leaves die off and curl around the base looking like wood shavings.
Flowers	Has a flower spike up to 4 m high. This flower spike has a large white or pinkish silky plume up to one metre long. Flowers in Autumn.
Fruit/seed	Produces copious seed.
Origin:	South America

DISTINCTIVE FEATURES

The Gahnias can often be confused with Pampas Grass, however some noticeable differences set them apart. Pampas grass generally has a greyish appearance. Gahnia has a dark coloured nut and pampas grass has a fluffy seed head that is wind dispersed. Pampas grass has an accumulation of dead foliage at its base where Gahnia does not.

WEED REMOVAL

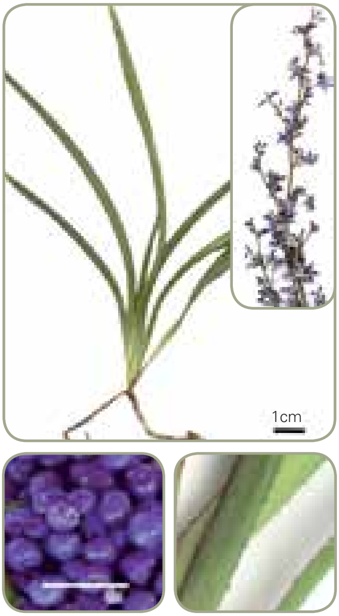
Pampas Grass can be hand removed as a seedling but as an adult, especially over 3m tall, requires other methods. All seed heads should be bagged for disposal. Safety must also be considered when removing this weed. The silica in the serrated edges can cut deep: gloves and goggles must be worn for protection. Long sleeves and long trousers are also highly recommended. When cutting pampas the silica can form a dust. A dust mask is useful to protect from inhalation and accidental ingestion.



BLUE FLAX LILY
AND SPIDER PLANT

NATIVE

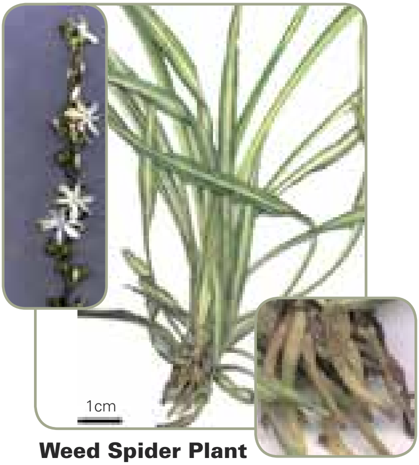
Name	Blue Flax Lily *(Dianella caerulea)*
Family	Liliaceae
Habit	Is a native tufted herb to 50 cm tall
Habitat	Found in woodland and sandstone plant communities. It prefers fertile soils in well shaded areas.
Leaves	Dark green strapped leaves which have small serrations can be felt along each edge. The leaves are sheathed at the base and attached to a small stalk.
Flowers	Flowers in spring and has a long flower spike with small blue flowers.
Fruit/Seed	Flowers turn into purple/blue berries. These are edible when ripe (purple).



Native Flax Lily

WEED

Name	Spider Plant *(Chlorophytum comosum)*
Family	Liliaceae
Habit	A tufted perennial herb to 60cm high
Habitat	A garden escape tolerant of drought conditions.
Leaves	Some varieties of Spider Plant are variegated (have white stripes up the leaves) or have pale green leaves. The leaves are thick and the roots are bulbous and used to store water.
Flowers	Flowers in summer and has small white flowers on its stalks.
Fruit/seed	Produces an angular seed capsule.
Origin	South Africa



Weed Spider Plant

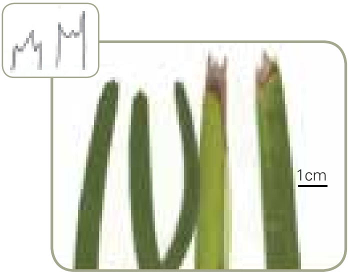
DISTINCTIVE FEATURES

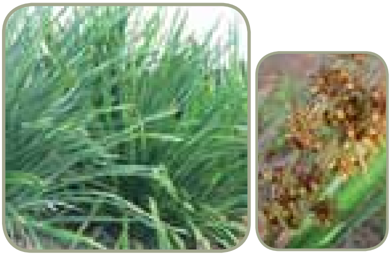
Spider plant can grow in a variety of conditions and spreads by seed and by vegetative parts. It has no serrations on its leaf edge, and the leaves can often elongate to produce a new plant from the tip (plantlet) that will root and detach from the original adult plant. The flowers and fruit of *Dianella caerulea* are often deformed by thrips.

WEED REMOVAL

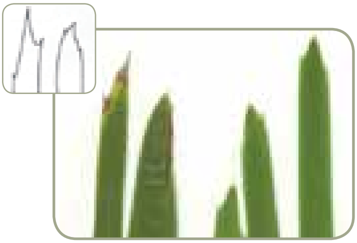
Spider plant can be dug out and left to dry out upside down on raft system to avoid root parts touching the soil. Be aware that after removal, especially of a large patch, dense germination of the weed can occur. Bulbous roots need not be removed.

SPINY HEADED MAT RUSH
AND *LOMANDRA HYSTRIX*





Native Spiny Headed Mat Rush



Weed *Lomandra hystrix*

DISTINCTIVE FEATURES

Unlike *Lomandra longifolia, L. hystrix* flowers in summer aswell as spring. The flowers of L.hystrix are far more loosely and openly branched than those of *L. longifolia. L. hystrix* leaves also lack conspicuous marginal bands on the leaves, and have a different different tip shape. L. hystrix does not seed as readily as *L. longifolia. Lomandra longifolia* has relatively thick leaf blades, and Aboriginal people used them to weave baskets. The white base of the leaf was also eaten.

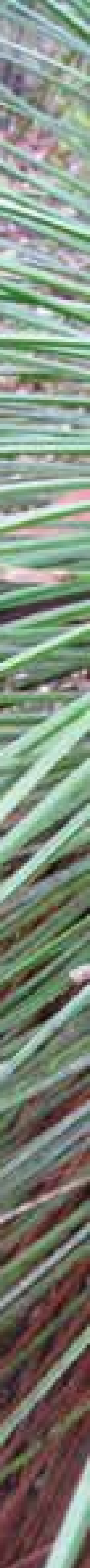
WEED REMOVAL

NATIVE

Name	Spiny Headed Mat Rush *(Lomandra longifolia)*
Family	Lomandraceae
Habit	Tufted, grass-like herb. Grows 50-100cm tall.
Habitat	Common and grows in a wide range of habitats.
Leaves	Wide strap-like leaves usually around 50 cm long, which are distinguishable by their hairless, conspicuous marginal sclerenchyma bands. The leaf apex or tip of this native is 2 or 3 toothed, with the central tooth pronounced. There are a few different forms of the teeth and these are generally orange brown or reddish brown.
Flowers	The flower spike of *L. longifolia* stands shorter than the leaf blades reaching maximum 15cm long. The flower clusters are whorled up the prickly, branched inflorescence and appear yellow or cream. They have male and female plants distinguished by their flowers. The male flowers are shorter at 3.5mm, where the female are around 4.5mm long. Flowers in spring only.
Fruit/Seed	Seeds like wheat grains and easy to propagate.

WEED

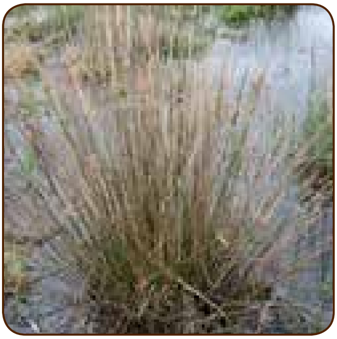
Name	*Lomandra hystrix*
Family	Lomandraceae
Habit	Grows from 90 to 150cm tall.
Habitat	Grows in a variety of habitats. Found along streams and on sandy soils north from Taree in NSW.
Leaves	Leaf blades are quite thin, a bright green, flat and wide and with a toothed tip. The tooth is acutely pointed and mostly white in colour (occasionally brown to reddish brown).
Flowers	Male and female flowers are very similar and both inflorescences will grow as tall as the leaf blades. The inflorescence is branched only twice and is flattened with whorled flower clusters. Male and female flower sizes are the same as *L. longifolia* and are yellow or cream. Flowers in spring and summer.
Origin	Australia. Only found north of Taree into Queensland. This plant has made its way into more southern areas due to the commercialisation as a hardy garden plant.



SEA RUSH
AND SPINY RUSH

NATIVE

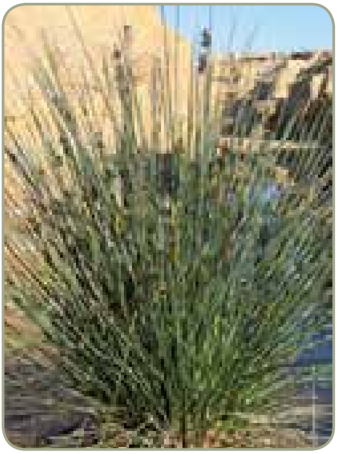
Name	Sea Rush *(Juncus kraussii)*
Family	Juncaceae
Habit	Grows between 1-2 m tall, and has a tall and open appearance.
Habitat	Grows in brackish waters/ coastal areas.
Leaves	Dark green, 1.5m long.
Flowers	Flowers spring to summer. Purplish brown flowers clusters on spikes.
Fruit/seed	Shiny dark brown capsules.



Native Sea Rush

WEED

Name	Spiny rush *(Juncus acutus)*
Family	Juncaceae
Habit	As the name suggests is a very spiky sedge. Has a characteristic globe shape to it, and can grow up to 1.6m tall.
Habitat	Grows along brackish or coastal areas.
Leaves	Stem-like, pith filled leaves.
Flowers	Flowers spring to summer.
Fruit/seed	Three celled brown capsule.
Origin	Europe, Africa and North America



Weed Spiny Rush

DISTINCTIVE FEATURES

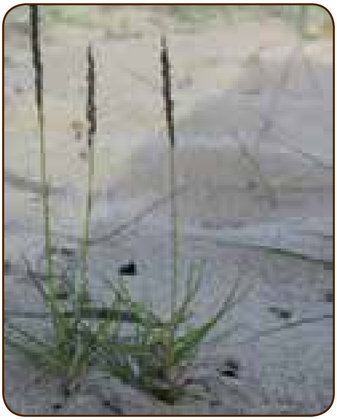
Looks similar to the Common Rush *(Juncus usitatus)* that grows in creeklines and fresh water/moist areas. The Sea Rush has more open stems, and often appears brown due to the dying leaves within its tufts. *Juncus acutus* is easily distinguished by its extremely sharp spiny leaf tips and its pith filled stems and leaves.

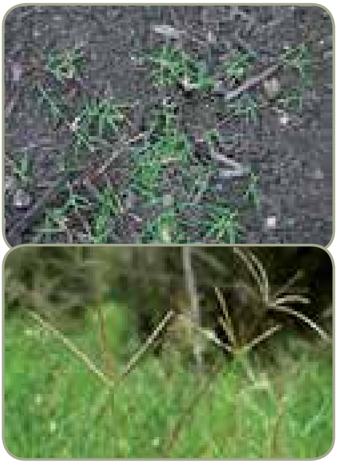
WEED REMOVAL

Spiny rush has invaded many significant wetland/salt marsh areas, and is particularly difficult to remove and control, because of its spiny nature, and the locations it inhabits. It can be mattocked out, but great care should be taken to avoid injury from the spiny tips. An alternative removal technique is to slash and then spray new growth with glyphosate (when tides are low to avoid water contamination). It is preferable to spray during warmer months.

H

SALTWATER COUCH
AND COMMON COUCH


Native Saltwater Couch


Weed Common Couch

NATIVE

Name	Saltwater Couch *(Sporobolous virginicus)*
Family	Poaceae
Habit	Perennial creeping grass that grows in coastal areas, often in thickets. It spreads using underground runners and by seed.
Habitat	Often grows in sandy soils.
Leaves	Erect and greyish green in colour. The grass blades can reach up to 50cm tall.
Flowers	Flowers spring-summer
Fruit/seed	Spikelet with two unequal glumes (dry leaves).

WEED

Name	Common Couch *(Cynodon dactylon)*
Family	Poaceae
Habit	Rhizotomous and stoloniferous, mat forming grass to 30cm. The runners along which it grows are often quite deep in the soil making it difficult to remove by hand without a lot of disturbance to surrounding native plants and the soil itself.
Habitat	Found in areas with disturbed soils, where there has been dumping and often is used for lawns.
Leaves	2-15cm long with a ligule.
Flowers	Flowers in summer.
Fruit/Seed	Has an awned seed head.
Origin:	Origin Southern Europe, Africa, Asia and Australia

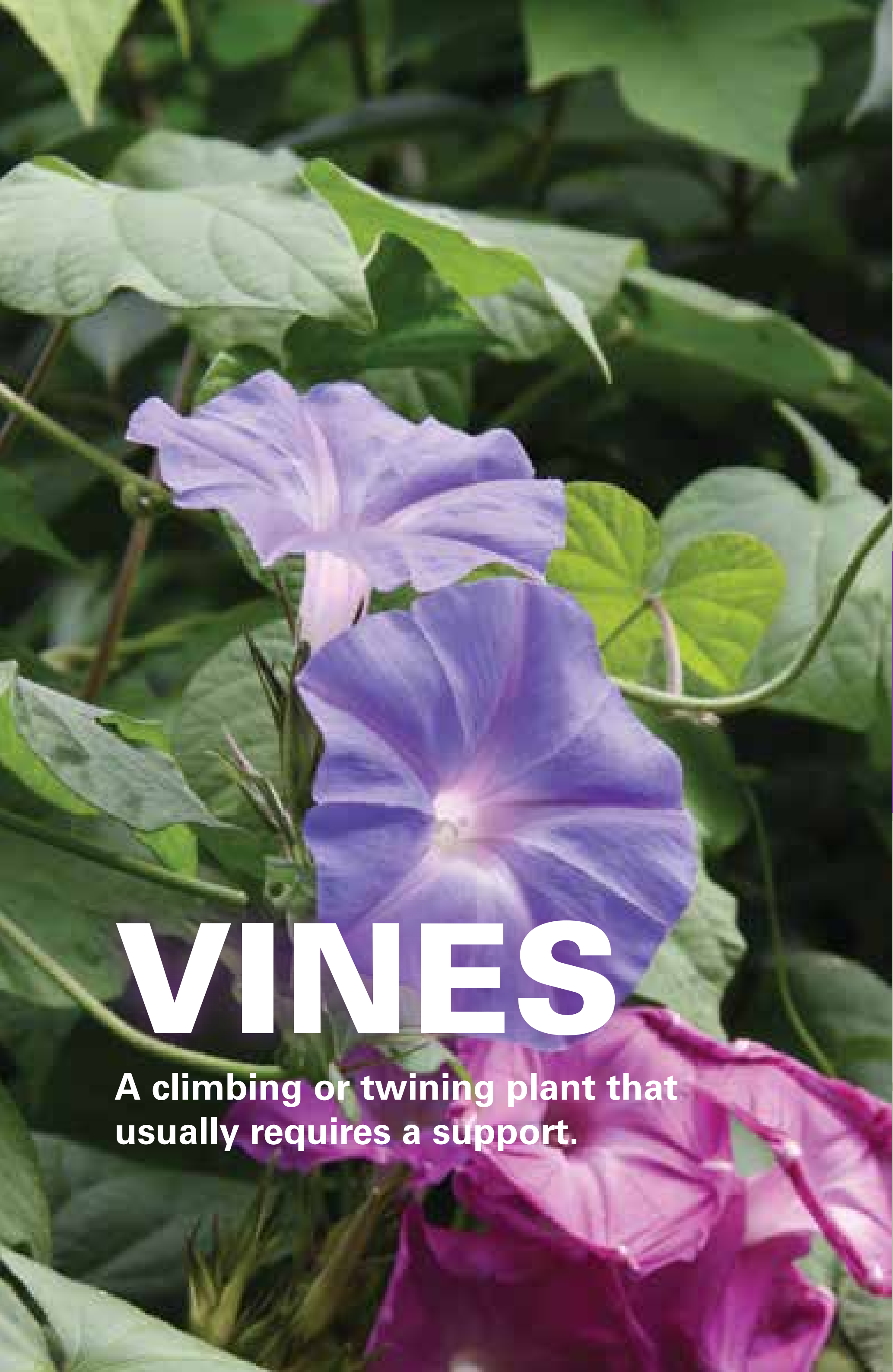
DISTINCTIVE FEATURES

Common couch leaves are a lot shorter than those of Saltwater Couch. It grows readily from seed and runners/dumped plants, as it roots readily from the stems.

WEED REMOVAL

Common Couch can be difficult to remove once it is established. If recently dumped, contain quickly and dispose of it via green waste bin. Dispose of any soil as well. Spraying can be effective but it will readily return. Stem scraping small sparse infestations can be very effective if root system not available due to depth or rocky. Couch can be important habitat for a range of lizards and frogs, so often preventing it from spreading further into good bush can be more valuable than attempting complete removal.

H



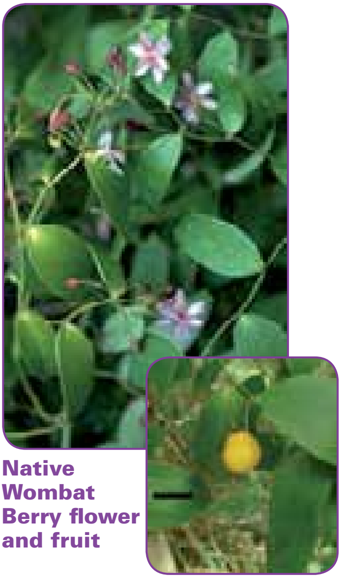
VINES

A climbing or twining plant that usually requires a support.

WOMBAT BERRY
AND BRIDAL CREEPER

NATIVE

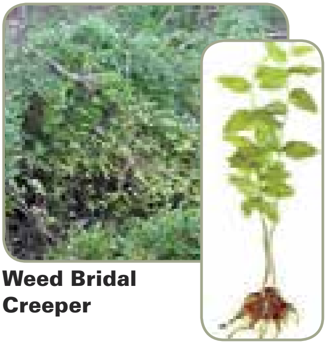
Name	Wombat Berry *(Eustrephus latifolius)*
Family	Luzuriagaceae
Habit	Climber growing to several metres long.
Habitat	Common in moist sheltered forests, heath and woodland. It prefers fertile soils.
Leaves	Grows on a long green stem and its leaves are thin and flexible (about 8cm long) and have distinctive longitudinal veins.
Flowers	Pink flowers with fringed edges. Flowers in spring.
Fruit	Bright orange berries that are edible and taste similar to tangerine.



Native Wombat Berry flower and fruit

WEED

Name	Bridal Creeper *(Asparagus asparagoides)*
Family	Asparagaceae
Habit	Twiner/ scrambler/ vine like herb that grows in open woodlands on fertile soil.
Habitat	Mostly found in sunny locations along creeklines and roadsides.
Leaves	1.5cm and sharply pointed with parallel veins.
Flowers	Small white flowers which bloom in August to September.
Fruit/seed	Produces bright red berries that are quite sticky and irresistible to many birds.
Origin	South Africa. Introduced as a garden plant.



Weed Bridal Creeper

DISTINCTIVE FEATURES

Bridal creeper leaves are much smaller (1.5cm) than Wombat Berry, and are sharply pointed with parallel veins. Bridal creeper also has an unusual root system. Has a rhizome with water storage tuberous roots. The tubers cannot grow into another plant, but the rhizome can easily sprout new leaves if it is not removed. Bridal creeper can also be distinguished by its bright red berries.

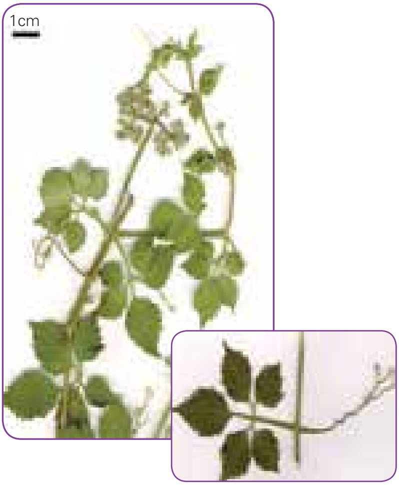
WEED REMOVAL

Berries should be bagged and removed from the area as even if green these will still ripen after removal from the plant. In 2000 the bridal creeper rust fungus, *Puccinia myrsiphylli* was released to control this weed. If you see plants that have yellow spots on the leaves, then leave them so the rust can take over.

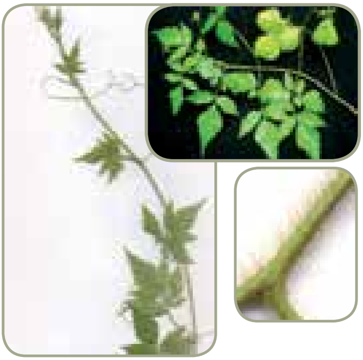
More info: csiro.au/Outcomes/Safeguarding-Australia/Bridal-Creeper-Rust-Fungus.aspx

SLENDER GRAPE

AND BALLOON VINE



Native Slender Grape
Source: Coastcare Australia



Weed Ballon Vine

NATIVE

Name	Slender Grape *(Cayratia clematidea)*
Family	Vitaceae
Habit	Herbaceous scrambler that generally grows under 1m long. Has underground stems and tubers from which new growth sprouts each spring.
Habitat	Rainforest, humid gullies and coastal areas. It is said to be locally restricted to the Royal and Ku-ring-gai National Parks, although is spreading more due to dispersal by birds.
Leaves	Rather fleshy hairless stem with leaves that have short sparse hairs and an opposing tendril to help it climb.
Flowers	It has a cluster of small green flowers in summer.
Fruit/seed	Produce 5-6mm black berries.

WEED

Name	Balloon Vine *(Cardiospermum grandiflorum)*
Family	Sapindaceae
Habit	Vigorous climber that will climb as long as it can grow (up to 30m). It will smother trees and shrubs by cutting off their sunlight.
Habitat	Prefers wet sites such as creek-lines and urban drainage zones.
Leaves	Bright green with soft hairs. The stem is covered with soft hairs (red brown) and the base stem (cream) can be up to 5cm thick.
Flowers	Flowers most of the year. Clusters of white flowers each with four petals.
Fruit/seed	Balloon like papery capsule with hard black seeds inside which can germinate up to and even after 18 months in the soil.
Origin	Tropical Asia, Africa and North America.

DISTINCTIVE FEATURES

Balloon vine leaves and stems have fine hairs on them where slender grape does not. Balloon vine has a distinctive papery seed capsule and is found along creeks and rivers as the seed capsule is readily carried and distributed along waterlines. Slender grape is much smaller and less dense than balloon vine growing to under 1m long.

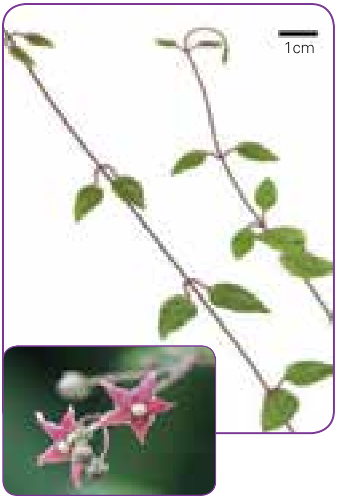
WEED REMOVAL

Skirting will allow vine to die in situ and reduces stress on supporting tree and fauna possibly using vine for habitat. Vine tops die off and stems attached to the soil can then be treated. Follow up will be required as will green waste disposal of viable seed pods.

TYLOPHORA BARBATA AND HONEYSUCKLE

NATIVE

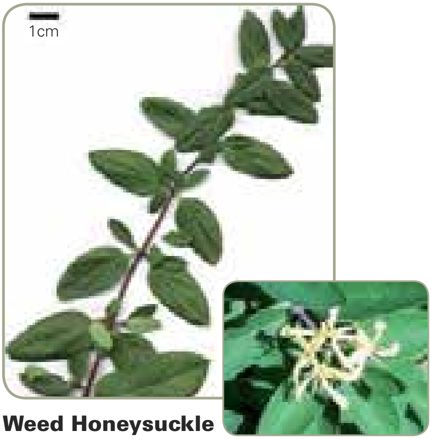
Name	*Tylophora barbata*
Family	Apocynaceae
Habit	Scrambling twiner that grows densely on forest floor as well as over shrubs and stumps.
Habitat	Found in Blue Gum High Forest or on rich soils.
Leaves	2.5-6cm long
Flowers	Pink flowers with fringed edges. Flowers in spring.
Fruit	Reproduces vegetatively.



Native *Tylophora barbata* and its flower

WEED

Name	Honeysuckle *(Lonicera japonica)*
Family	Caprifoliaceae
Habit	Scrambler, climber. The vine will often twine around native plants and suffocate them.
Habitat	Found in a variety of locations around habitation and on the edges of rainforest and closed forest, in riparian and disturbed areas.
Leaves	Are opposite with a prominent ridge and 3-8cm long.
Flowers	Orange and white flowers that bloom in spring.
Fruit/seed	Produce dark shiny black berries.
Origin:	Asia



Weed Honeysuckle

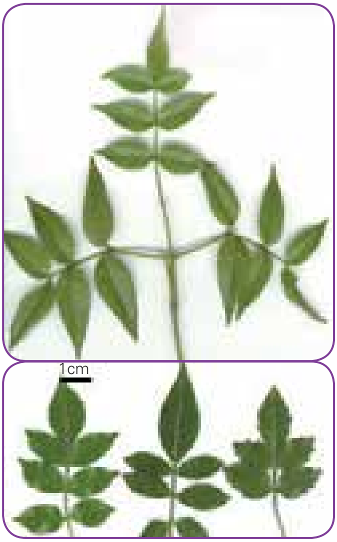
DISTINCTIVE FEATURES

The berries of honeysuckle are distributed by birds and segments of vine can root at nodes to form new plants. Honeysuckle is distinguished by its orange stem and generally has a larger leaf size. *Tylophora* has a milky or watery latex in the stems. Honeysuckle is a vigorous climber and will grow upwards many metres while *Tylophora* grows along the ground and upwards only very weakly. When in flower the two have very different flowers. *Tylophora* has a small purple-red flower while honeysuckle has orange and white flowers.

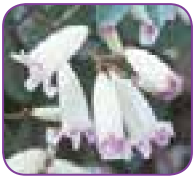
WEED REMOVAL

Care must be taken to pull up all the rooting nodes where the vine is growing along the ground to avoid reshooting. Treat root parts and skirt vine in living trees as much as possible to help the tree's chance of survival.

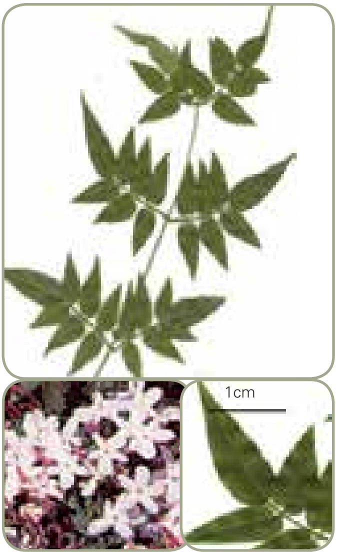
S



Variations of leaf shape



Native Wonga-Wonga vine



Weed Common Jasmine

WONGA WONGA VINE
AND COMMON JASMINE

NATIVE

Name	*Wonga Wonga vine* *(Pandorea pandorana)*
Family	Bignoniaceae
Habit	Vigorous woody climber
Habitat	Grows all along eastern NSW in varying soils and climates.
Leaves	Compound, thick and glossy. Juvenile leaves are opposite and largely reduced in size with toothed margins.
Flowers	Blooms in Spring.
Seeds	Large brown pods (3-7 cm) that release papery thin seeds that are wind spread.

WEED

Name	Common Jasmine *(Jasminum polyanthum)*
Family	Oleaceae
Habit	Fast growing evergreen climber.
Habitat	Grows well in heavier, more fertile soils in a moist location.
Leaves	Compound leaves, that are dark green, dull and with wavy margins.
Flowers	Pink to white tubular flowers that have a sweet smell and are seen in spring.
Fruit/seed	Produce a fleshy black berry.
Origin	China

DISTINCTIVE FEATURES

Wonga wonga vine has glossy leaves where Jasmine has thinner duller leaves with wavy margins. The two are also distinctive when they are in seed. Wonga wonga vine has brown pods that release papery winged seeds where Jasmine has a fleshy black berry.

WEED REMOVAL

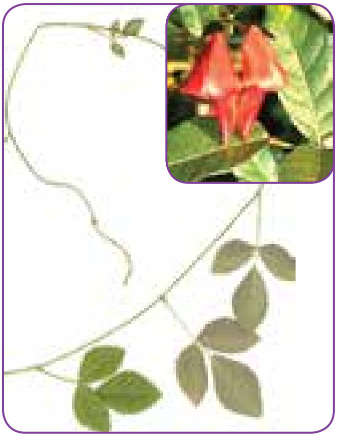
Jasmine sends off very tough runners which can climb over fences and into bushland, choking natives as it goes. Ensure all nodes along the vine are also pulled up and skirting can be applied.

S H

DUSKY CORAL PEA
AND *DOLICHOS PEA*

NATIVE

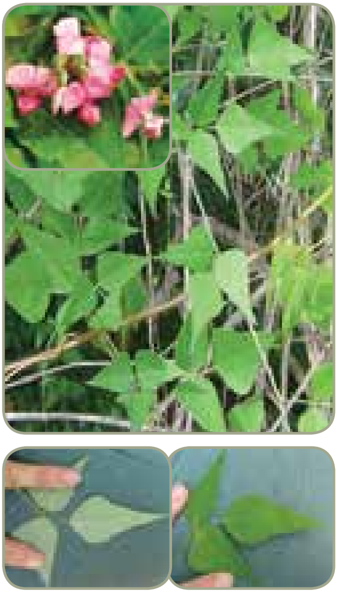
Name	Dusky Coral Pea *(Kennedia rubicunda)*
Family	Fabaceae
Habit	A vine and robust climber.
Habitat	Found in Blue Gum High Forest or on rich soils.
Leaves	Leaves have rounded edges, and are pale green with small hairs.
Flowers	Distinctive red flowers in spring.
Fruit	Hairy long brown pods.



Native Dusky Coral Pea

WEED

Name	Dilochos pea *(Dipogon lignosus)*
Family	Fabaceae
Habit	Climber
Habitat	Can be found growing on the edges of reserves, generally adjacent to housing or developed areas.
Leaves	Thin, hairless, diamond shaped leaves the underside of which is very pale in colour.
Flowers	Bright pink flowers, fading to mauve on long slender stalks. Flowers in spring.
Fruit/seed	Green sickle shaped pods with black seeds.
Origin	Africa



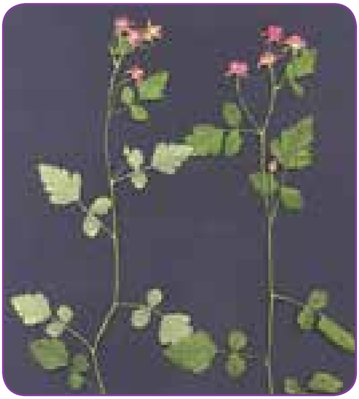
Weed Dolichos pea

DISTINCTIVE FEATURES

Aboriginal people were known to suck the flowers of the Dusky Coral Pea for the nectar and use the vine as twine for securing things. *Dipogon lignosus* was introduced to Australia as a garden plant. It can be distinguished from the native by its thin, hairless, diamond shaped leaves. It also has bright pink to mauve (as opposed to red) coloured flowers.

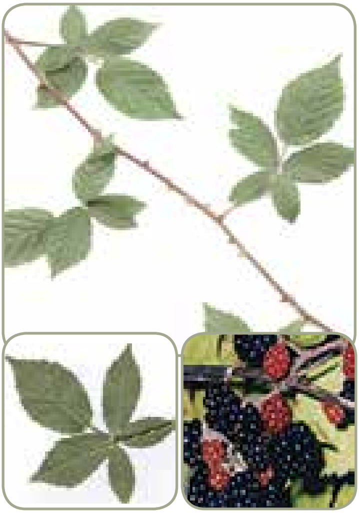
WEED REMOVAL

This vine can be weedy and suffocate natives, but generally is not as harmful to native bushland as some other weed vines.



Native Raspberry

Source: Hornsby Online Herbarium: Jennifer Lewis



Weed Blackberry

NATIVE RASPBERRY
AND BLACKBERRY

NATIVE

Name	Native raspberry *(Rubus sp.)*
Family	Rosaceae
Habit	Scrambler. Not common but when found are usually dense in growth.
Habitat	Moist forests in valleys.
Leaves	Much smaller, lighter in colour and have white felt on their underside. The leaves are pinnate and 3 lobed (uncommonly 5).
Flowers	Produce small pink flowers in spring.
Seeds	Produce a small red edible fruit which looks similar to a commercial raspberry.

WEED

Name	Blackberry *(Rubus fruticosus)*
Family	Rosaceae
Habit	Grows erect as a scrambling shrub and can be deciduous in winter.
Habitat	Can grow in humid to subhumid regions with fertile soils. It can invade disturbed areas, roadsides, creek banks, orchards and forests, but cannot tolerate dense shade.
Leaves	Has dark green leaves (new growth is lighter green). The underside of the leaf is light green and smooth to touch.
Flowers	Produces whitish flowers in summer
Fruit/seed	Produces a large berry that changes from green to red to black.
Origin	Europe

DISTINCTIVE FEATURES

The native raspberries have prickles up the stem but they are much smaller (and less painful) than blackberry. The blackberry's leaves are much larger than the native, 3 to 5 lobed and each lobe is oval shaped and serrated.

WEED REMOVAL

The weed Blackberry can be hand removed, however the stem often breaks leaving the rhizome intact for regrowth. A virus used as a biological controls have been released on blackberry, if you see the leaves turning golden or with mould patches then a biological control is in use. This control does not completely kill blackberry but does slow its growth.

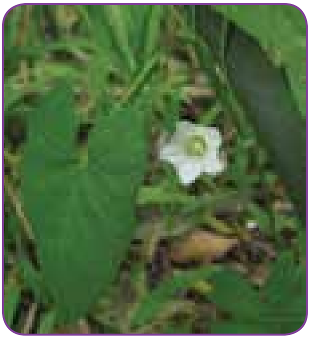
BINDWEED
AND MORNING GLORY

NATIVE

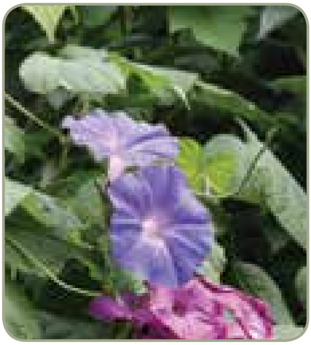
Name	Bindweed *(Calystegia marginata)*
Family	Convolvulaceae
Habit	A vine and robust climber.
Habitat	Moist gullies and rainforest margins. It is fairly widespread, though not common.
Leaves	Arrow shaped and can be up to 10cm long and 8cm wide.
Flowers	White to pale mauve flowers around 2cm long appear in spring and summer.
Fruit/seed	Round capsule.

WEED

Name	Morning Glory *(Ipomoea indica)*
Family	Convolvulaceae
Habit	Vigorous twining and climbing perrenial.
Habitat	Disturbed areas, forest margins and riparian areas. Quickly colonises and under favourable conditions of full sun and ample moisture will smother all other vegetation.
Leaves	Large heart-shaped leaves up to 17cm long.
Flowers	Spectacular broad trumpet shaped blue or purple flowers (always over 5cm).
Fruit/seed	Capsule
Origin	Tropical regions of the world.



Native Bindweed



Weed Morning Glory

DISTINCTIVE FEATURES

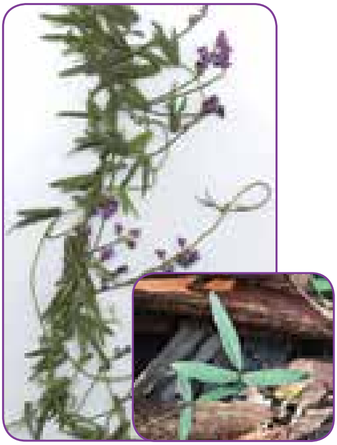
Bindweed can be confused with Morning Glory as both are twiners and have somewhat similar leaf shapes and funnel-like flower structures. Morning Glory can be distinguished from Bindweed by the size and shape of the leaves (Ipomea leaves are much bigger, broader, rounder and heart-shaped). The leaves also may support hairs whereas the native has none. The flowers of this weed are always over 5cm compared with 2cm for the native and different in colour. Note: There is also an introduced Calystegia, *C.silvatica* with white flowers which is a garden escape in northern Sydney.

WEED REMOVAL

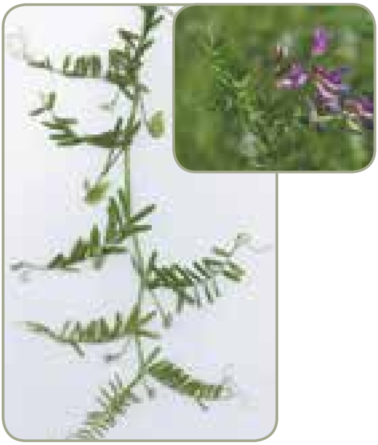
Make sure you remove as much of the root structures of Morning Glory as possible. Small nodes (rooting points) left in the ground will re-sprout if not pulled out. If Morning Glory has reached the canopy of remnant native trees and is causing them stress use skirting method. Bindweed often smothers emerging natives at ground level. Don't feel too bad about pulling it away from other natives, as it will always grow back. It also readily seeds, and can make a rather nice hanging basket or rockery feature plant in a garden.

LOVE CREEPERS

AND VETCH



Native Glycine, (insert) showing trifoliate leaves



Weed Vetch, (insert) Vetch Flowers

NATIVE

Name	Love Creepers *(Glycine sp.)* The three local species to Hornsby Shire are *G. clandestina, G. tabacina and G. microphylla*
Family	Fabaceae
Habit	Slender twiners.
Habitat	Commonly found in moist situations, usually amongst dense undergrowth and grasses.
Leaves	Have three leaflets which can grow up to 6cm.
Flowers	Mauve, pea-like flowers appearing in spring and summer.
Fruit/Seed	Generally straight pod

WEED

Name	Vetch *(Vicia sp.)*
Family	Fabaceae
Habit	Trailing or climbing herbs.
Habitat	Usually found along roadsides, fire trails and other disturbed areas.
Leaves	Consist of two rows of leaflets and end of a tendril.
Flowers	Often appear throughout the year and range in colour from pink to white to purple-blue.
Fruit/seed	Pods
Origin	Europe/Asia

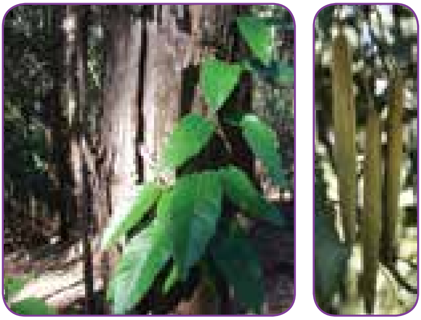
DISTINCTIVE FEATURES

Glycine species can potentially be confused with species of Vetch due to them all being of the Fabaceae or 'Pea' family, with similar slim twining habit and similar flower colour and structure. *Glycine* is quite easy to distinguish from the weed Vetch by observing its leaves. The native has three-leaflet (trifoliate) leaf structure which is quite distinct from the Vetch.

WEED REMOVAL

Vetch is best removed by patiently tracing the stems back to the base and hand-pulling out the roots.

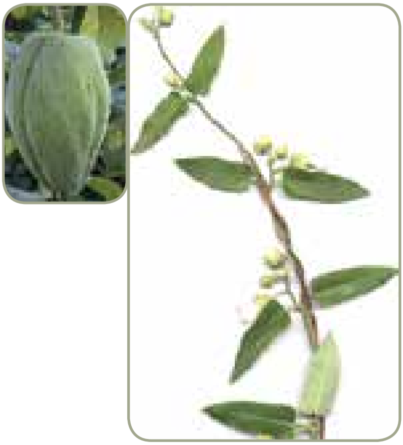
MONKEY ROPE
AND MOTH VINE



Native Monkey Rope and its fruit

NATIVE

Name	Monkey rope *(Parsonsia straminea)*
Family	Apocynaceae
Habit	Robust rainforest climber, has woody stems many metres long.
Habitat	Rainforest and sclerophyll forest.
Leaves	Juvenile plants appear remarkably different from the adults, having tiny soft leaves with purple undersides. Adult leaves are opposite, hairless, tough, thick, shiny above and dull beneath.
Flowers	Cream to pale pink flowers form in summer.
Fruit/seed	Consists of a long, green finger-like pod containing numerous seeds, each with a tuft of silky hairs.



Weed Moth Vine and Moth Vine fruit

WEED

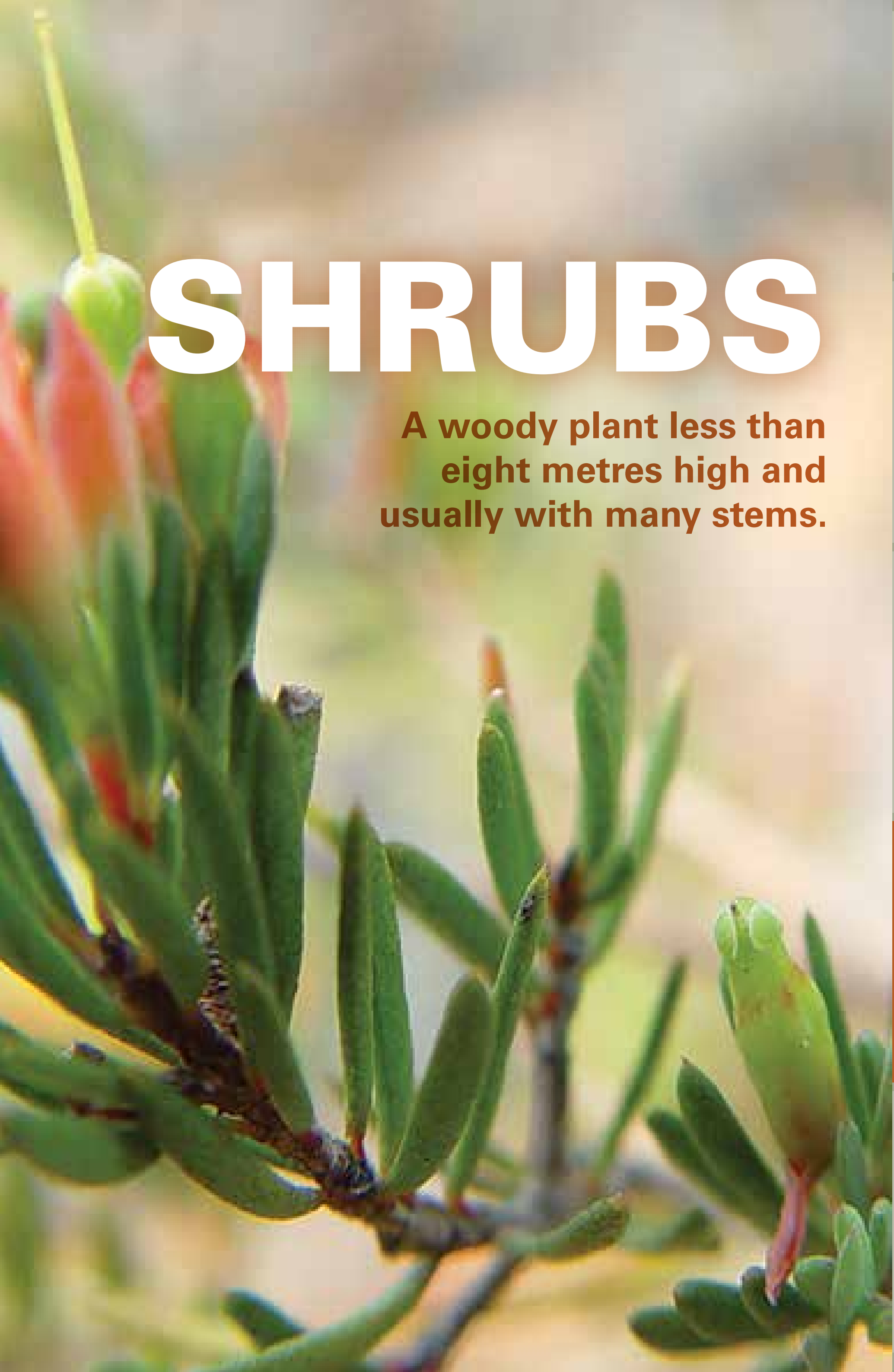
Name	Moth Plant *(Araujia sericifera)*
Family	Asclepiadaceae
Habit	Robust climber.
Habitat	Disturbed environments.
Leaves	Greyish leaves.
Flowers	White to pale pink, 2-2.5cm in size.
Fruit/seed	Large swollen fruit similar to a Choko. When ripe, the fruit will explode sending the 'moth' like seeds floating through the air as the hairs catch the breeze.
Origin	South America

DISTINCTIVE FEATURES

The Monkey Rope can be confused with Moth Plant due to them both being extensive climbers with roughly similar shaped leaves. All parts of the moth vine plant exude a milky white sap when cut, which makes it difficult to control using normal vine removal techniques with herbicides. A major difference between the two plants, besides the fruit, is the colour and texture of the leaves and the colour of the sap.

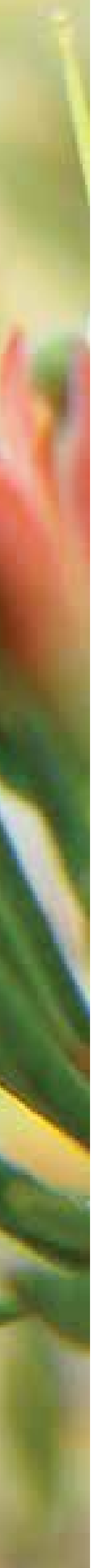
WEED REMOVAL

Collect and dispose of all visible fruit, if possible. Seedlings may be hand-removed from the ground; larger, older plants using pull out easily, may need to be dug out, or else scrape the stems and paint with neat herbicide.



SHRUBS

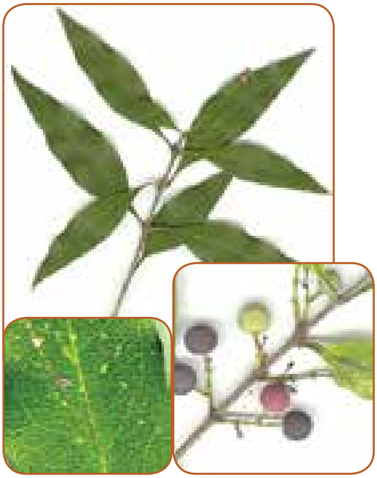
A woody plant less than eight metres high and usually with many stems.



MOCK OLIVE
AND LARGE LEAF PRIVET

NATIVE

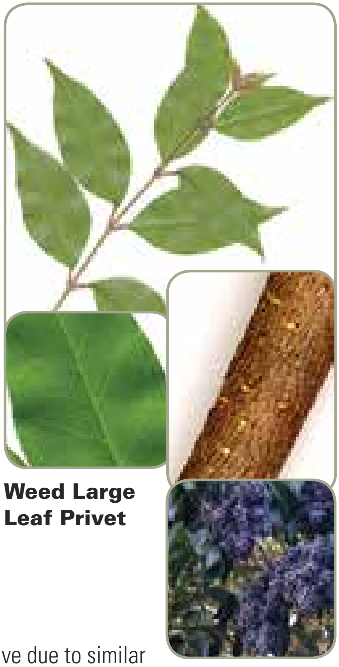
Name	Mock Olive *(Notelaea longifolia)*
Family	Oleaceae (same family as olives we eat).
Habit	Shrub to 2-3m.
Habitat	This native grows commonly on moist sloped, fertile soils, often in Privet forests (so take care when controlling Privet).
Leaves	Very tough and textured and when rubbed together feel and sound like rough paper. Leaves grow opposite, in a decussate formation from the stem. Has conspicuous rough network of veins.
Flowers	Creamish green in colour. Flowers autumn to spring.
Fruit/seed	Dark bluish black berries, 0.5cm wide.



Native Mock Olive and its fruit

WEED

Name	Large Leaf Privet *(Ligustrum lucidum)*
Family	Oleaceae
Habit	Has grey trunks often with white moss/ lichen patches up it. It also has irregular bumps up its trunks called 'lenticels' that allow the trunk to breathe.
Habitat	Wide range of habitats particularly disturbed areas with increased water and nutrient run-off.
Leaves	Dark green, lower surface paler.
Flowers	Creamy white with a sickly sweet fragrance. Flowers spring to summer.
Fruit/seed	Like olives, small (8mm wide) black berries that attract birds. Birds contribute to distribution of Privet.
Origin	China and Japan.

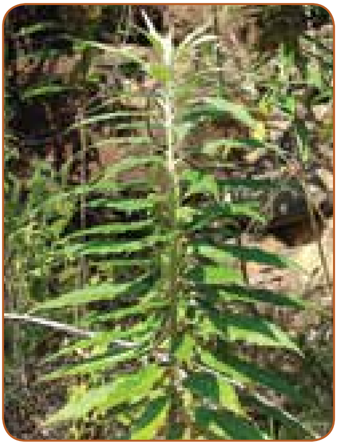


Weed Large Leaf Privet

DISTINCTIVE FEATURES

Large Leaf Privet can be easily confused with the Mock Olive due to similar leaf shape. The veins on the Privet are less obvious and the leaves much thinner and shinier than the *Notelaea*. Flowering Privet can affect allergy sufferers, so caution should be taken during the flowering season in spring.

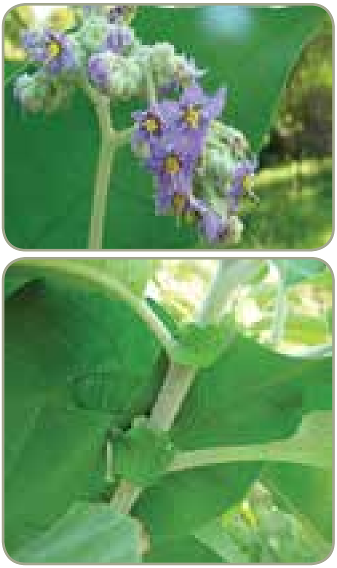
NATIVE TOBACCO
AND WILD TOBACCO



Native Tobacco
Photos: Paul Marynissen and Steve Pym

NATIVE

Name	Native Tobacco or Flannel Leaf *(Astrotricha floccosa)*
Family	Araliaceae
Habit	Grows 2-3 m tall. This plant is fast growing, but short lived.
Habitat	Restricted to the Sydney region, especially north of the harbour on sandstone soil types.
Leaves	As the common name suggests the leaves feel like felt due to dense woolly hairs on the underside of the leaf and up the stem. The leaves are elongated and light green in colour, with no smell.
Flowers	Small clusters of flowers that are white to cream and furry and appear in October to November.
Fruit/Seed	A dry fruit which when mature splits into a number of parts.



Weed Wild Tobacco and its flower

WEED

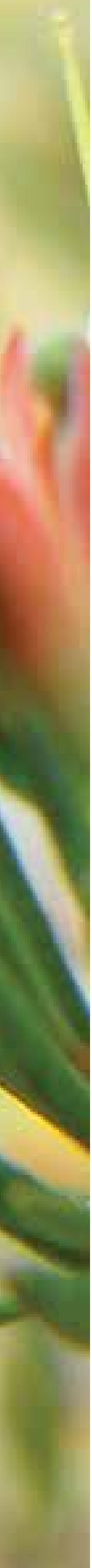
Name	Wild Tobacco Tree *(Solanum mauritianum)*
Family	Solanaceae
Habit	Tree/shrub to 4m.
Habitat	Moist edges, roadsides and pastures and occasionally is found growing in woodlands if they are moist enough.
Leaves	Large broad leaves to 30cm long that are aromatic when rubbed. The leaves, like the native, are covered in dense hairs. These hairs also cover the trunk and branches. From each leaf a leaflet grows which easily distinguishes it from the native.
Flowers	Bright purple flowers appearing in spring.
Fruit/seed	Green succulent berries, autumn - spring.
Origin	Tropical Asia

DISTINCTIVE FEATURES

The weed is easily distinguished from the native by the leaflet which grows from each leaf. Also the native is non-aromatic in comparison to the distinctive aroma of the weed.

WEED REMOVAL

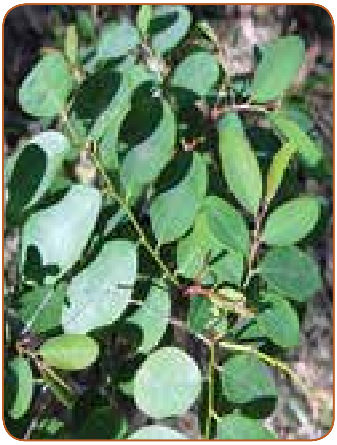
Care must be taken as the fine hairs can often be skin, eye and throat irritants.



BREYNIA
AND CASSIA

NATIVE

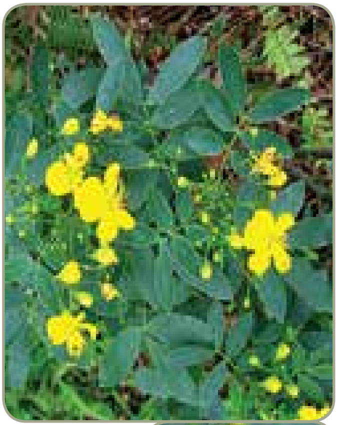
Name	Breynia or Coffee Bush *(Breynia oblongifolia)*
Family	Euphorbiaceae
Habit	Grows to 2.5m tall and has a reddish brown stem.
Habitat	Found in moist areas such as forests, sandstone gullies and creek banks on the Cumberland Plain.
Leaves	Has alternate leaves which are rounded, dull and olive green.
Flowers	Produces very small red flowers.
Fruit/seed	Produces small berries that change from orange to black when ripe. Each berry arises from the leaf base alternately up the stem.



Native Breynia

WEED

Name	Cassia *(Senna pendula)*
Family	Caesalpinaceae
Habit	It is a pea plant that grows to 4m tall with stems that are very dark coloured and tough to cut.
Habitat	Usually found on bushland edges or gardens in sunny, damp areas.
Leaves	Appear opposite, but it has alternate leaves that are compound. The leaves are ovate to elliptic and pale green colour.
Flowers	Distinctive bright yellow flowers about 3cm wide. These turn into long brown pods when ripe that are also very distinctive.
Fruit/seed	Produces large bean like seed pods to 8cm long with 5-10 seeds each and very long lived.
Origin	South America

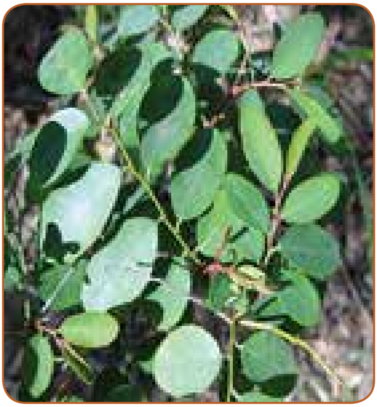


Weed Cassia and closeup of its flower

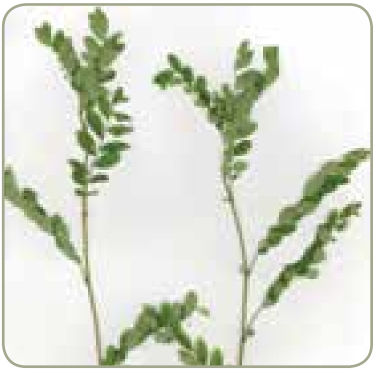
DISTINCTIVE FEATURES

Leaves arrangement along stem is the most obvious distinguishing feature when out of flower or fruiting time. Otherwise flowering and fruiting are very different as described above.

WEED REMOVAL



Native Breynia



Weed *Phyllanthus tenellus*

BREYNIA
AND *PHYLLANTHUS TENELLUS*

NATIVE

Name	Breynia or Coffee Bush *(Breynia oblongifolia)*
Family	Euphorbiaceae
Habit	Grows to 2.5 m tall and has a reddish brown stem.
Habitat	Found in moist areas such as forests, sandstone gullies and creek banks on the Cumberland Plain.
Leaves	Has alternate leaves which are rounded, dull and olive green.
Flowers	Produces very small red flowers.
Fruit/Seed	Produces small berries that change from orange to black when ripe. Each berry arises from the leaf base alternately up the stem.

WEED

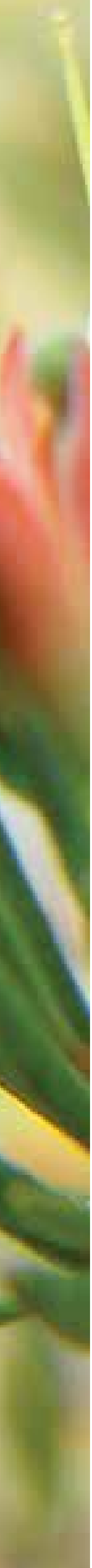
Name	*Phyllanthus tenellus*
Family	Euphorbiaceae
Habit	Grows up to 45cm tall.
Habitat	Common, often insignificant weed that is hardy and grows in a range of locations.
Leaves	Has wide obovate leaves 6-25mm long, pale underside to the leaf.
Flowers	White
Fruit/seed	Green capsules that turn brownish when ripe.
Origin	Madagascar

DISTINCTIVE FEATURES

There are also two native *Phyllanthus sp.* which may be confused with *P. tennellus* and they are *P. hirtellus* and *P. gunnii.* The two native species are however quite different. *P. hirtellus* or Thyme Spurge grows as a low herb, has hairy leaves and has a squarer leaf tip. *P. gunnii* more resembles the weed *P. tenellus*, having rounded/ obovate shaped leaves, but grows to 2m tall, bears reddish brown capsules and has leaves 10-20mm long.

WEED REMOVAL

1 GROUND COVERS
2 GRASSES & SEDGES
3 VINES
4 SHRUBS
5 TREES



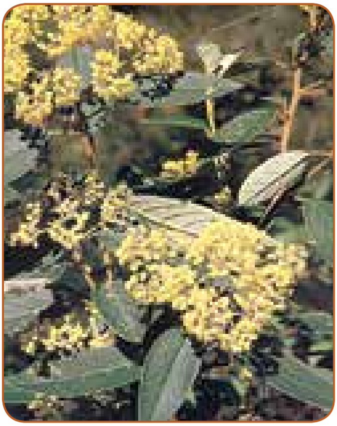
POMADERRIS
AND COTONEASTER

NATIVE

Name	Pomaderris sp. *(e.g. P. elliptica, P. ferruginea* and *P. intermedia)*
Family	Rhamnaceae
Habit	Pomaderris shrubs can grow between 2-3m.
Habitat	Grow in protected valleys of sandstone and shale.
Leaves	Have a felty underside leaf (which can be felt quite easily). The three common Pomaderris have leaves that are slightly different in shape, but all are discolourous, meaning that they are dark green on top, but whitish to cream underneath. The hairs on these species are slightly rusty in colour.
Flowers	Have distinctive dense panicles of small flowers and seed heads.
Fruit/seed	Produce small capsules which hold only a few seeds.

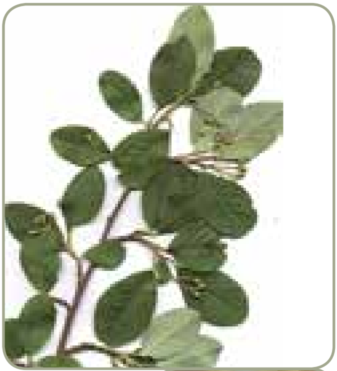
WEED

Name	Cotoneaster *(Cotoneaster glaucophyllus)*
Family	Rosaceae
Habit	Can grow to 5m.
Habitat	Grows readily on shale, fill and damp sandstone soils.
Leaves	Arranged alternately and like the Pomaderris, are discolourous with fine felt on the underside. Cotoneaster hairs are not rust coloured though, but white.
Flowers	Small white flowers.
Fruit/seed	Bright red berries.
Origin	China



Native Pomaderris

Source: Native Plants of the Sydney District, Fairley and Moore, Kangaroo Press 1989



Weed Cotoneaster and its fruit

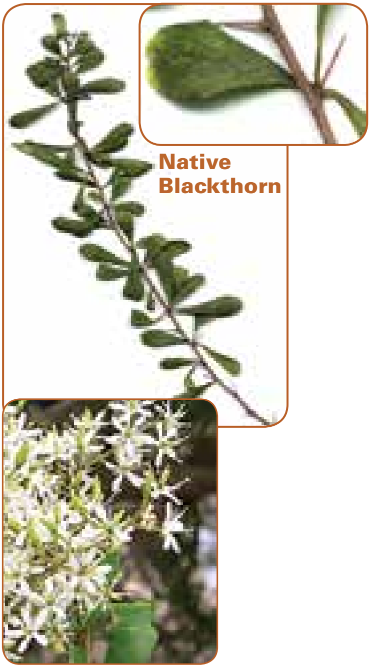
Source: Gardener's Companion to Weeds. S.Ermert, New Holland Publishers, 2001

DISTINCTIVE FEATURES

The most distinctive feature of Pomaderris is the felty underside of the leaf (which can be felt quite easily). Unlike Pomaderris, Cotoneaster hairs are not rust coloured but white. Another distinguishing feature of cotoneaster is that from autumn to winter some leaves turn scarlet before dropping off. Birds are attracted to the berries of Cotoneaster and disperse them through bushland via droppings or regurgitation. Cotoneaster is often used as an ornamental garden plant.

WEED REMOVAL

BLACKTHORN
AND FIRETHORN

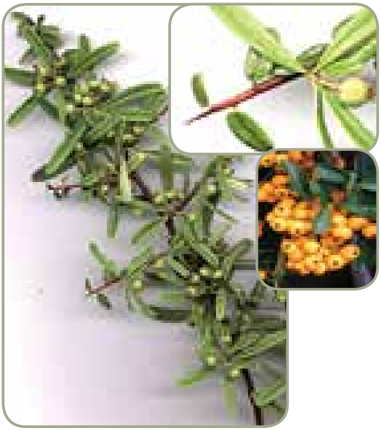


NATIVE

Name	Blackthorn *(Bursaria spinosa)*
Family	Pittosporaceae
Habit	Erect shrub of 2-3 m.
Habitat	Found on the Cumberland Plain, creeklines on sandstone soils and in forests as an understorey plant.
Leaves	Foliage is sparse and has very small thorns arising at each leaf.
Flowers	Has a plume of small sweet smelling white flowers in summer.
Fruit/Seed	Small flattened seed capsules, circular in shape.

WEED

Name	Firethorn *(Pyracantha angustifolia)*
Family	Malaceae
Habit	Evergreen shrub to 4m in height.
Habitat	Cooler climates, and in Sydney grows in the Blue Mountains, on the North Shore of Sydney and on sandstone and shale soils.
Leaves	Leaves grow on large thorns.
Flowers	White clusters. Flowers mostly in spring and summer.
Fruit	Produces orange berries in the summer.
Origin	China



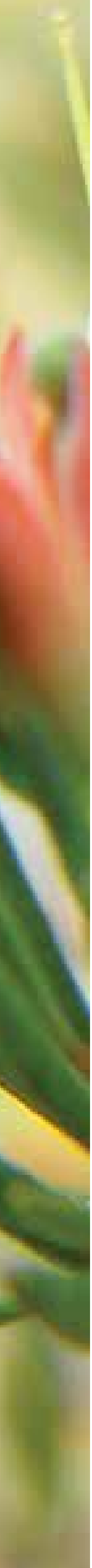
Weed Firethorn and its fruit

DISTINCTIVE FEATURES

Another similar weed is the African Boxthorn *(Lycium ferrocissimum)* which has darker red berries than the Firethorn and grows a lot larger, much spinier and often in impenetrable thickets. Originally introduced as a hedge plant in pastures.The thorns of the Firethorn are much larger than that of the native Bursaria. The distinctive orange berries are eaten and dispersed by birds. Firethorn was introduced from China as a garden plant and is often still found in rural areas.

WEED REMOVAL

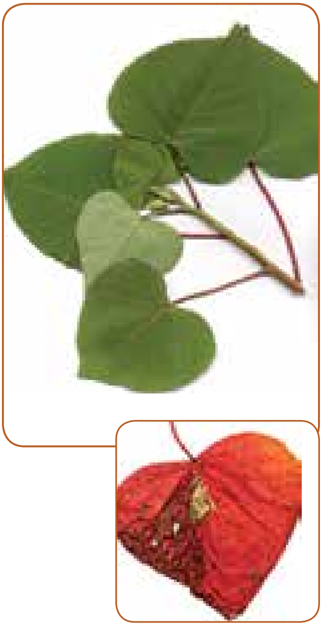
Beware of the thorns and make sure thick gloves and safety glasses are worn. If there are berries try to either compost them or bag them to prevent weed spread by birds.



BLEEDING HEART
AND CHINESE TALLOW TREE

NATIVE

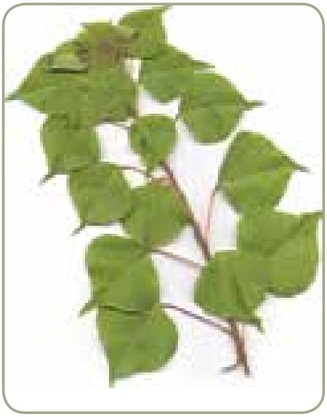
Name	Bleeding Heart *(Homalanthus populifolius)*
Family	Euphorbiaceae
Habit	Is a native coloniser plant which grows as a leafy shrub to 2-4m tall.
Habitat	Tends to grow opportunistically in rainforest and gully margins
Leaves	Large (around 10-15cm long) heart shaped and hairless, and turn a deep red before they drop.
Flowers	The flower head is a spike that arises at the tip of the leaf branch.
Fruit/seed	Smooth capsule 8-10mm wide.



Native Bleeding Heart

WEED

Name	Chinese Tallow Tree *(Triadica sebifera)*
Family	Euphorbiaceae
Habit	Deciduous. Grows to 7m with a spread of 3m.
Habitat	Prefers boggy soils, in protected sunny positions.
Leaves	Has heart shaped leaves with a thin point at the tip. The leaves also turn red in autumn.
Flowers	Has spikes of flowers, which are yellow. Flowers late spring to summer.
Fruit/seed	Capsules green, maturing to black. Seeds whitish and up to 3 per capsule.
Origin	China



Weed Chinese Tallow Tree

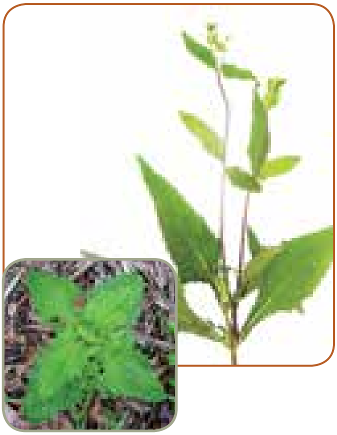
DISTINCTIVE FEATURES

The Bleeding Heart plant has obvious red stalks and the leaf is much paler underneath than Chinese Tallow Tree. The Bleeding Heart has a semi succulent stem, and can be bushy.

Chinese Tallow has heart shaped leaves but these are much smaller (around 7cm) and more abundant on each stem than Bleeding Heart.

WEED REMOVAL

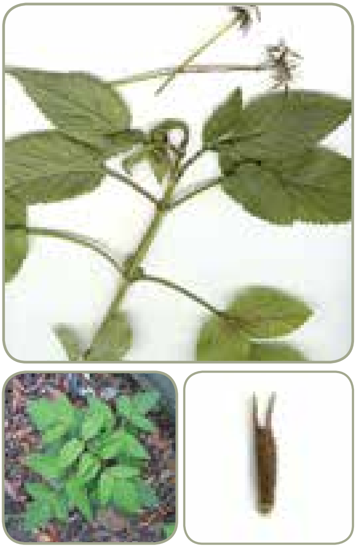
INDIAN WEED
AND BIDENS PILOSA



Native Indian Weed and insert shows juvenile plant

NATIVE

Name	Indian Weed *(Sigesbeckia orientalis)*
Family	Asteraceae
Habit	An annual which grows to 1.5m high. Is a coloniser that will germinate after disturbance. An important species as it protects native seedlings growing below it from the elements.
Habitat	Grows in sunny open position at a rapid rate, but also grows well in shade.
Leaves	Have deep/obvious branched venation and irregular serrations on the edges.
Flowers	Produces small yellow flowers
Fruit/Seed	Seed heads have sticky glands around them. (This helps them to attach to animals/ people for dispersal)



Weed *Bidens pilosa* and insert shows juvenile plant and seed

WEED

Name	Variety of common names: Cobblers Pegs, Farmers Friends, Devils Pitch Forks *(Bidens pilosa)*
Family	Asteraceae
Habit	Grows to 2 metres in height. Is an annual where it is subject to frost and perennial in warmer areas in Sydney.
Habitat	This weed can travel far and wide and often grows thickly in sunny disturbed sites such as roadsides, tracks and bare soil.
Leaves	Variable leaf shape and size.
Flowers	White clusters. Flowers mostly in spring and summer.
Fruit	Has yellow flowers with white petals.
Origin	Temperate and tropical America

DISTINCTIVE FEATURES

Compared to the native Sigesbeckia, Bidens has leaves that are trifoliate (1 big leaf with two smaller leaves from the main leaf base).

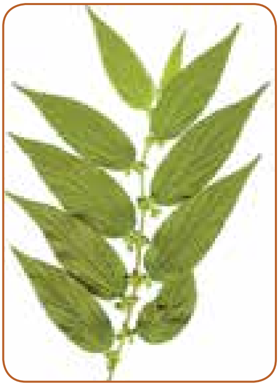
WEED REMOVAL

All flowers and seeds should be removed and bagged for disposal. The seeds are capable of staying viable for up to 5 years, so it is important to remove it before it seeds.

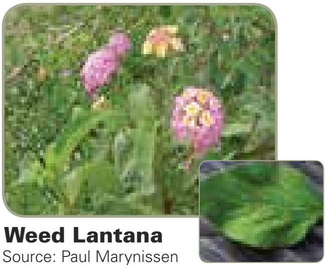
NATIVE PEACH
AND LANTANA

NATIVE

Name	Native Peach *(Trema tomentosa* prev. *T. aspera)*
Family	Ulmaceae
Habit	Shrub or small tree to 2.5m.
Habitat	Found on sandstone, shale and volcanic soils of Sydney commonly in moist forests and creek banks.
Leaves	Has fine grained smooth brown stems and rough, light green, thin-textured tri-veined leaves. Leaf margins are toothed and as with all members of the family, are alternately arranged on the stem.
Flowers	Inconspicuous greenish flowers.
Fruit/seed	The fruit of the Native Peach is small, black and shiny when ripe and less than 5mm in diameter. The small black drupes (berries) arise from each petiole and are ripe from Feb- May.



Native Peach



Weed Lantana
Source: Paul Marynissen

WEED

Name	Lantana *(Lantana camara)*
Family	Verbenaceae
Habit	Has square woody stems (as with all Verbenaceae), highly noticeable in lantana. Lantana has barbs up these stems that help the shrub to extend its branches and hook them onto trees like a vine. It also can grow as a dense thicket.
Habitat	Grows anywhere in temperate climates in coastal areas.
Leaves	Are opposite and odorous when crushed. Young Lantana can be identified by square stems and broad odorous leaves.
Flowers	Has brightly coloured flowers, with an array of colours.
Fruit/seed	Seeds yellow/brown to 4mm long capsule
Origin	North, Central and South America. Originally cultivated for hedges and garden.

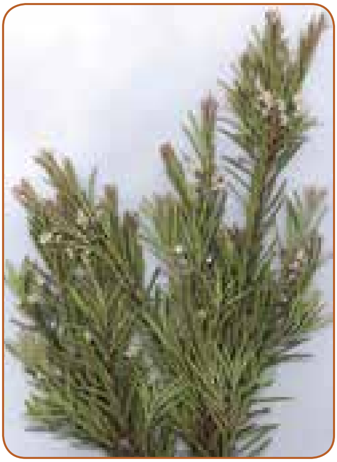
DISTINCTIVE FEATURES

Trema is often confused with Lantana due to the leaf venation. Lantana leaves are much wider than Trema and are odorous when crushed. Lantana leaves are also opposite while Trema are not. Young Lantana can be identified by the square stems and broad odorous leaves. Trema has rounded stems, the leaves have no conspicuous smell when crushed and grows as a tree/shrub but not a scrambler like Lantana.

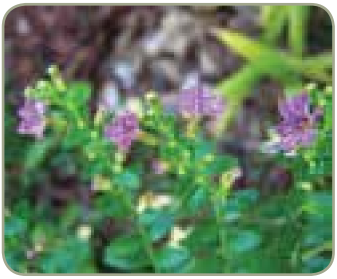
WEED REMOVAL

Lantana provides very good habitat for many birds and marsupials due to the thickets and protective barbed branches. Prior to removing this weed, check for signs of local fauna, such as nests or dreys present. Where possible, leave in situ to reduce impact with cut and painting of main stem. Return for follow up as branches can layer and re-sprout. Branches can be easily snapped, compacted and left as a small pile to decompose on a raft system (ensure roots are off the ground as it can re-sprout). This pile can provide habitat for small birds and lizards. Care should be taken by wearing gloves and safety glasses to protect against the barbs. Skirt and leave any climbing branches in trees.

NARROW-LEAF MYRTLE
AND MEXICAN FALSE HEATHER



Native Narrow-leaf Myrtle



Weed Mexican False Heather

NATIVE

Name	Narrow Leaf Myrtle *(Austromyrtus tenuifolia)*
Family	Myrtaceae
Habit	Sprawling, dense, erect form, growing to around 1.5m.
Habitat	Damp, sheltered places, mainly along sandstone creeks.
Leaves	Opposite and narrow with fine stiff points, and the new shoots are covered in silky hairs. as with all members of the Myrtaceae family, the leaves of the Narrow-leaf Myrtle give off a strong Eucalyptus smell when crushed.
Flowers	Small white flowers occur in November and December
Fruit/Seed	Dark purple berries

WEED

Name	Mexican False Heather *(Cuphea hyssopifolia)*
Family	Lythraceae
Habit	Small shrub growing to 60cm.
Habitat	Along creeklines and it is often seen growing between or on rocks the has been widely.
Leaves	Elliptical leaves
Flowers	Purple-pink flowers appearing late winter and spring.
Fruit/seed	Capsule which releases seeds of about 1.5mm long
Origin	Mexico and Guatemala

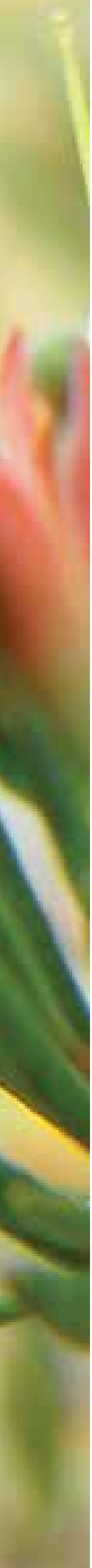
DISTINCTIVE FEATURES

Narrow leaf myrtle can be confused with the Mexican False Heather largely because of their comparable appearance and the fact they can both be found in similar moist locations. Mexican False Heather can be distinguished from the Narrow-leaf Myrtle by its more elliptical leaves and purple-pink flowers, which appear in late winter and spring. The Mexican False Heather also lacks the strong eucalyptus smell when its leaves are crushed.

WEED REMOVAL

Care should be taken not to disturb natives in the same rock crevice or growing close by. As the plant is generally found in creek lines, herbicide use should be kept to a minimum.

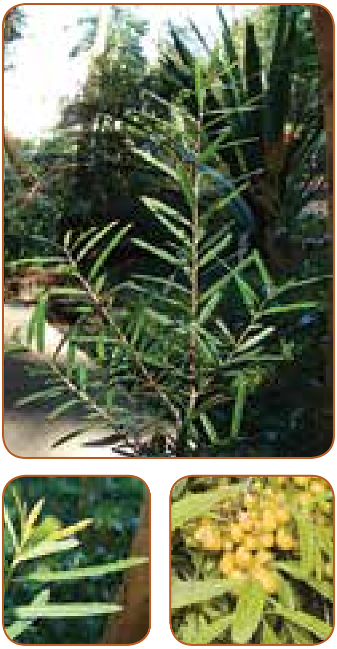
H



NARROW-LEAVED ORANGEBARK AND GOLDFUSSIA

NATIVE

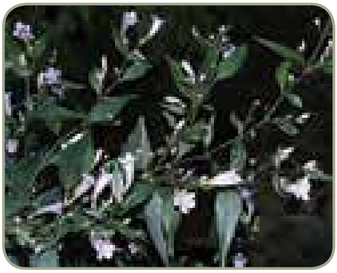
Name	Narrow-leaved Orangebark *(Maytenus silvestris)*
Family	Celastraceae
Habit	Low spreading or erect shrub up to 3m.
Habitat	Relatively uncommon understorey plant found in moist areas.
Leaves	Narrow, alternate and fairly tough, occasionally with a few teeth towards the upper end.
Flowers	White or pale green emerging in summer.
Fruit/seed	Orange egg shaped berries.



Native Narrow-leafed Orangebark

WEED

Name	Goldfussia *(Strobilanthes anisophyllus)*
Family	Acanthaceae
Habit	Small shrub, growing up to 1.5m.
Habitat	Tolerates full sun and shaded locations.
Leaves	Glossy, dark green stained /purplish black, lance shaped and toothed. The stems are prominently ridged and often square in cross section.
Flowers	Appear in spring and can be mauve, lavender or blue.
Fruit/seed	Hairy 7-10mm long capsule.
Origin	India



Weed Goldfussia

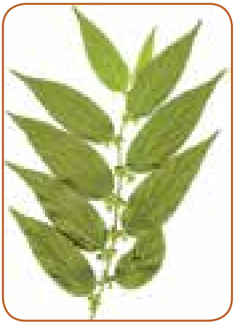
DISTINCTIVE FEATURES

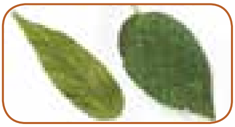
Goldfussia is often selected by gardeners because of its dark foliage colour, a feature distinguishing it from the Narrow-leaved Orangebark. The similar leaf shape and growing conditions may cause confusion.

WEED REMOVAL

The Acanthaceae seed generally disperse through the seed drying and exploding to spread seed away from the parent plant. Bag and dispose of all seed when removing this plant, or treat it before it forms seed capsules.

NATIVE PEACH
AND HACKBERRY


Native Peach

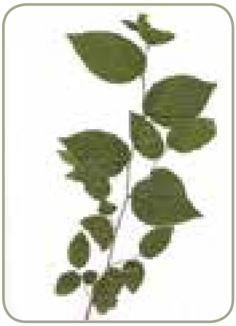

Different leaf venation of Trema (left) to Celtis (right)

NATIVE

Name	Native Peach *(Trema tomentosa* prev. *T. aspera)*
Family	Ulmaceae
Habit	Shrub or small tree to 2.5m.
Habitat	Found on sandstone, shale and volcanic soils of Sydney commonly in moist forests and creek banks.
Leaves	Has fine grained smooth brown stems and rough, light green, thin-textured tri-veined leaves. Leaf margins are toothed and as with all members of the family, are alternately arranged on the stem.
Flowers	Inconspicuous greenish flowers.
Fruit/Seed	Fruit of the Native Peach is small, black and shiny when ripe and less than 5mm in diameter. The small black drupes (berries) arise from each petiole and are ripe from Feb-May.

WEED

Name	Hackberry *(Celtis occidentalis)*
Family	Ulmaceae
Habit	Medium sized deciduous tree.
Habitat	Along rivers and creeks in Sydney bushland.
Leaves	The base of leaves are usually quite strongly asymmetrical and the upper surface (only) is rough to touch.
Flowers	Greenish flowers.
Fruit/seed	A purplish black fleshy drupe which grows to 1cm diameter.
Origin	North America

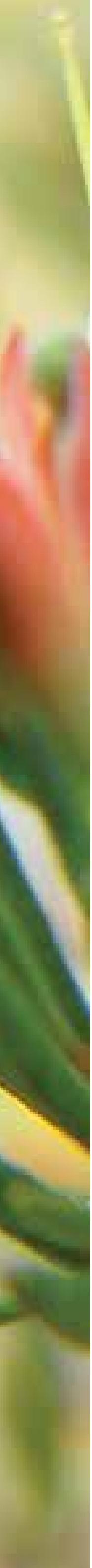

Weed Hackberry

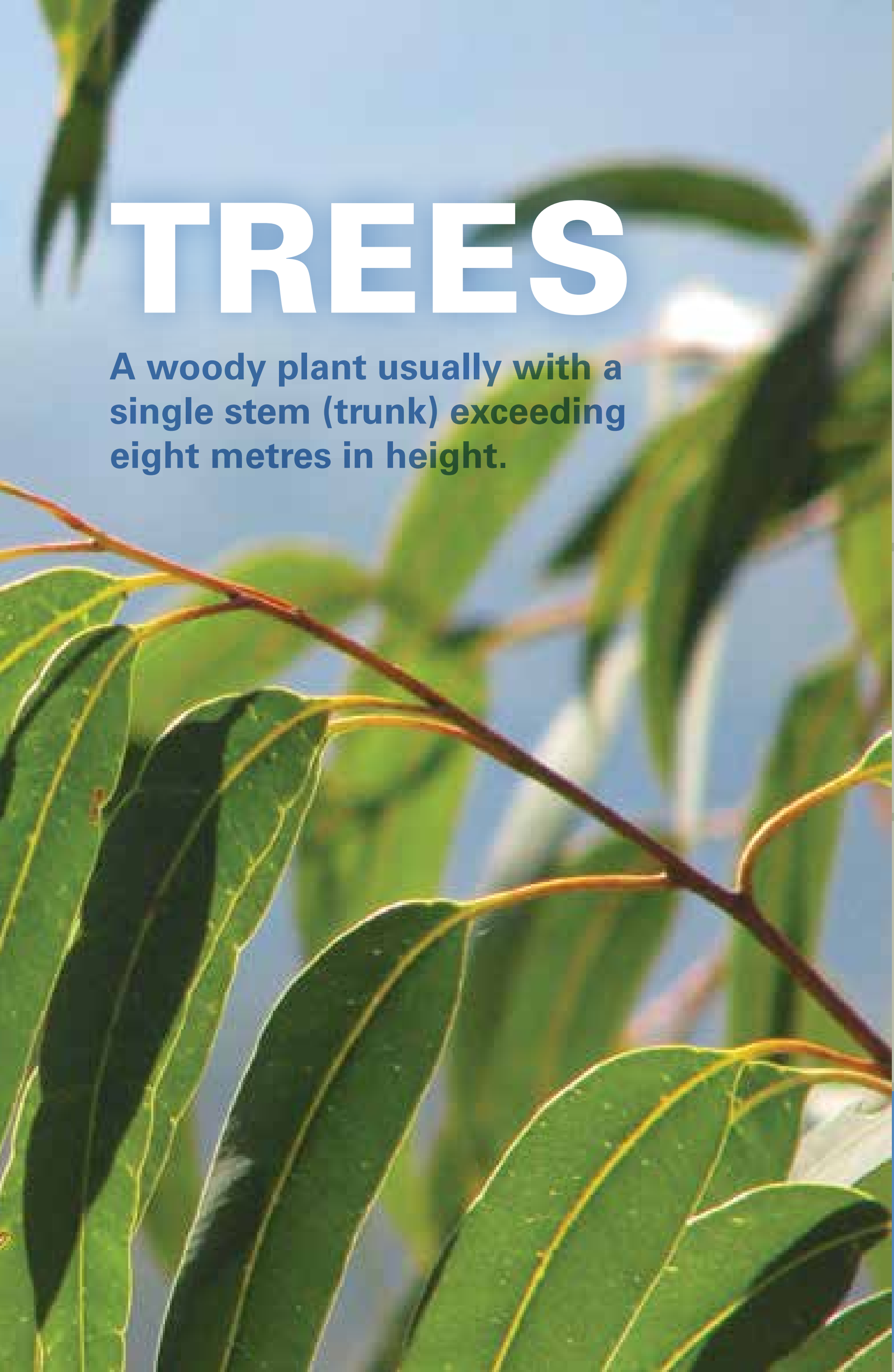
DISTINCTIVE FEATURES

The Native Peach can be confused with both the Hackberry and cultivated peach trees, largely because of similarities in the appearance of the leaves. However, unlike these two look-alikes, the Native Peach is an evergreen and retains it leaves throughout the year. The Hackberry has been used as an ornamental tree in Australia, escaping to become a weed. Despite belonging to same family as the Native Peach, the leaves of the Hackberry differ in that only the upper surface is rough to the touch. Also, the fruit of the Hackberry is larger than that of the Native Peach, growing to around 1cm in diameter. The peach tree, grown for its edible fruit, can escape into bushland from orchards and backyards, or from discarded seeds. The leaves lack the roughness of the Native Peach, and the vein structure appears quite different. The Peach tree has numerous lateral veins running almost perpendicular to the large mid-vein, whereas the native Peach has fewer veins coming off the mid-vein and at a much sharper angle. The peach is not an invasive weed.

WEED REMOVAL

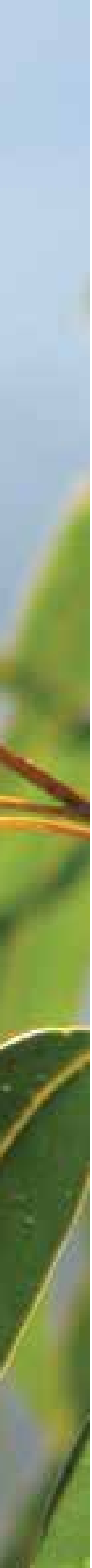
Treat during the growing season.





TREES

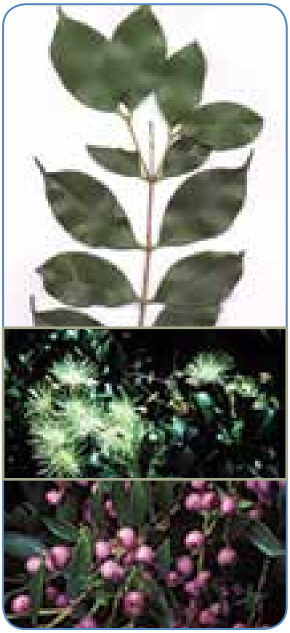
A woody plant usually with a single stem (trunk) exceeding eight metres in height.



LILLY PILLY
AND LARGE LEAF PRIVET

NATIVE

Name	Lilly Pilly *(Acmena smithii)*
Family	Myrtaceae (as are the Eucalypts and Angophoras)
Habit	A shrub to tall tree.
Habitat	Found in moist gullies, creeklines, rainforests and cliff lines.
Leaves	Deep glossy green
Flowers	Cream flowers that are fluffy and honey scented. Flowers November-February.
Fruit/seed	Produces large white to pink berries that are edible and attract birds, possums and bats.



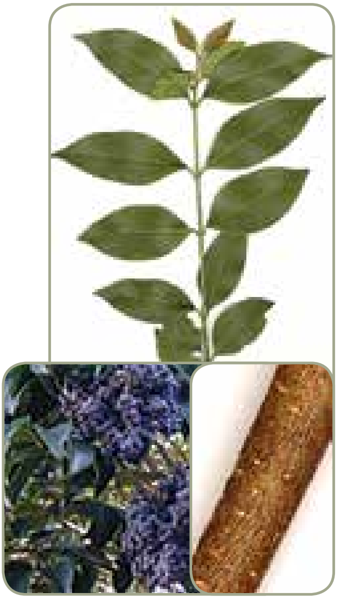
Native Lilly Pilly leaves, flower and fruit

WEED

Name	Large Leaf Privet *(Ligustrum lucidum)*
Family	Oleaceae
Habit	Grey trunks often with white moss/lichen patches up it. It also has irregular bumps up its trunks called 'lenticels' that allow the trunk to breathe.
Habitat	Wide range of habitats particularly disturbed areas with increased water and nutrient run-off.
Leaves	Dark green, lower surface paler.
Flowers	Creamy white with a sickly sweet fragrance. Flowers spring to summer.
Fruit/seed	Like olives, are small (0.2cm wide) blue-black berries that attract birds. Birds contribute to distribution of Privet.
Origin	China and Japan

DISTINCTIVE FEATURES

A distinctive feature of the Lilly Pilly that can identify it from the Large Leaf Privet is that the native has reddish brown tough bark. The leaf also has a distinctive elongated tip referred to as a 'drip tip'. Large leaf privet can be easily confused with the Lilly Pilly as a juvenile (and vice versa) due to the leaf shape. Privets can often out-compete other species and become a monoculture in bushland as a highly invasive weed. Birds assist with the distribution of Privet around the Sydney area.

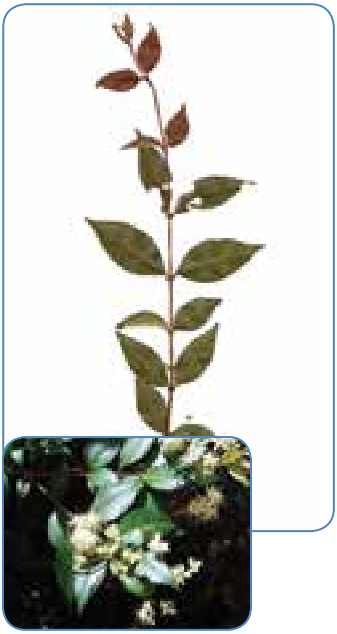


Weed Large Leaf Privet leaves, flower and close up of bark

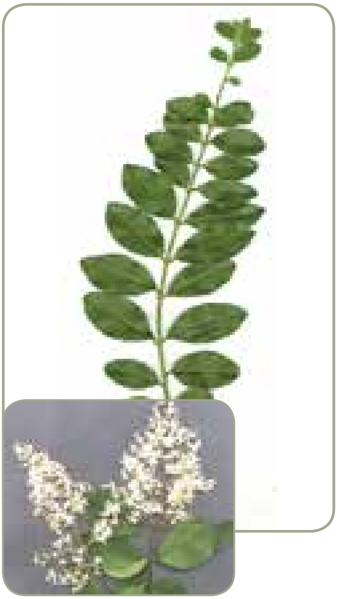
WEED REMOVAL

GREY MYRTLE

AND SMALL LEAF PRIVET



Native Grey Myrtle and flower



Weed Small Leaf Privet and flower

NATIVE

Name	Grey Myrtle *(Backhousia myrtifolia) is related to the Lilly Pilly*
Family	Myrtaceae
Habit	Grows to 4m.
Habitat	Widespread in warmer rainforests, often near streams and sheltered gullies.
Leaves	Distinctive reddish stems with leathery leaves, often with horizontal ridges on its surface. New growth is slightly hairy and pink.
Flowers	Mostly white, petals 2-3mm long. Flowers Dec-Jan.
Fruit/seed	Fruit is 6mm long topped by spreading sepals.

WEED

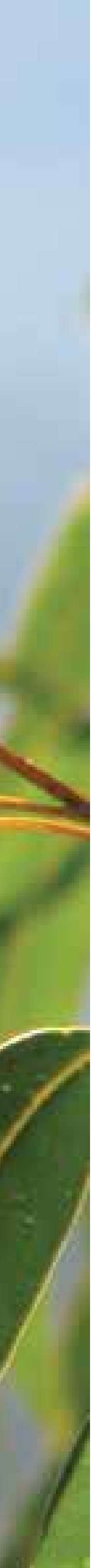
Name	Small leaf Privet *(Ligustrum sinense)*
Family	Oleaceae
Habit	Grows to 3m tall.
Habitat	Generally found on nutrient rich sites such as creeklines, runoff zones, stormwater drains and gullies.
Leaves	Has grey stems and rather thin, pale green, opposite leaves, which are slightly rounded.
Flowers	Produces petalled white flowers in spring.
Fruit/seed	Purple/black berries.
Origin	China

DISTINCTIVE FEATURES

Grey myrtle is generally easy to identify as an adult plant, growing, but as a seedling it can often be confused as a weed if it is growing amongst small leaf Privet seedlings. The Grey Myrtle has tougher, more leathery leaves and often has horizontal ridges on its surface. It also has a distinctive reddish stem as does the Lilly Pilly. New growth on Grey Myrtle is also slightly hairy and pink. Small leaf privet has purple/black berries that are readily spread by birds.

WEED REMOVAL

H



RED CEDAR
AND RHUS TREE

NATIVE

Name	Red Cedar *(Toona ciliata)*
Family	Meliaceae
Habit	20-40m high.
Habitat	Found in subtropical rainforests generally in the south and north of Sydney.
Leaves	Pinnate leaves with no terminal leaflet, which are shiny on both sides. The leaves turn yellow in mid winter, and have rosy new leaves in spring.
Flowers	Small white flowers.
Fruit/seed	Brown woody capsules.

WEED

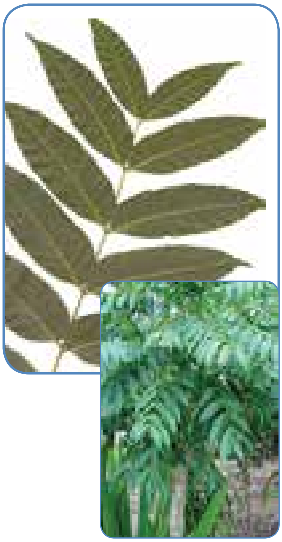
Name	Rhus Tree *(Toxicodendron succedaneum)*
Family	Anacardiaceae
Habit	Grows to 8 metres.
Habitat	Undisturbed bushland on fertile soils, gardens and public areas.
Leaves	Tree crown spreads from a single trunk and has alternate compound leaves, with a terminal leaflet. Upper surface is dark green and the underside is light green. During winter the leaves turn a bright red colour and can be seen quite easily amongst surrounding native vegetation.
Flowers	Yellowish green
Fruit/seed	Clusters of pale brown berries (5-7mm).
Origin	India and East Asia

DISTINCTIVE FEATURES

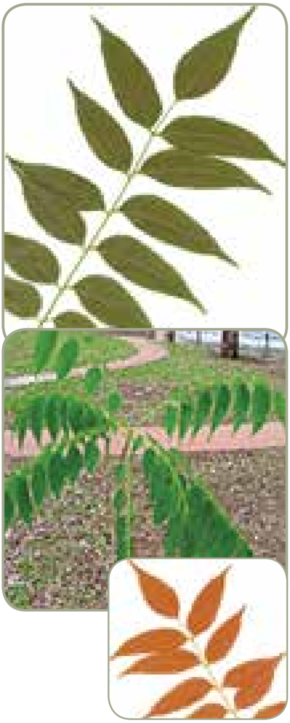
In the past Red Cedar was logged for premium furniture timber. Rhus tree is commonly known to cause severe allergic reactions, especially after skin contact with the sap. This plant should be treated with care. Chinese Pistachio and Tree of Heaven (both non natives) also look like the Rhus tree but both have no terminal leaflet.

WEED REMOVAL

Removal of the Rhus Tree should be carried out with extreme care as this plant is highly toxic and can cause severe dermatitis and swelling of the face if come into contact with the skin.



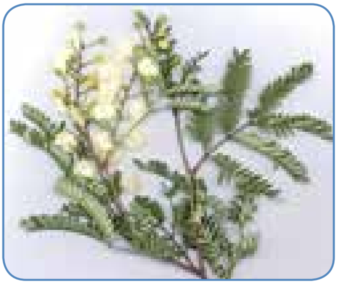
Native Red Cedar leaves and juvenile Red Cedar



Weed Rhus Tree leaves and red winter leaves

1 GROUND COVERS
2 GRASSES & SEDGES
3 VINES
4 SHRUBS
5 TREES

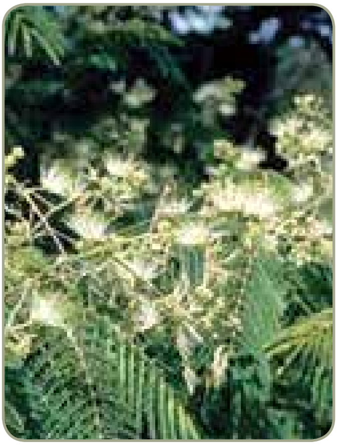
SUNSHINE WATTLE
AND ALBIZIA



Native Sunshine Wattle
Source: Jenifer Lewis, Hornsby Online Herbarium

NATIVE

Name	Sunshine Wattle *(Acacia terminalis)*
Family	Mimosaceae
Habit	Shrub - small tree (to 2m).
Habitat	Mostly found in woodlands and heath in moist sandstone soil.
Leaves	Very tough, pointed and hairless. Oil glands on this wattle are not as significant as other wattle trees/shrubs.
Flowers	Globular in shape and bright yellow in colour with long. Flowers in late summer to winter.
Fruit/seed	Brown pods up to 3cm.



Weed Albizia

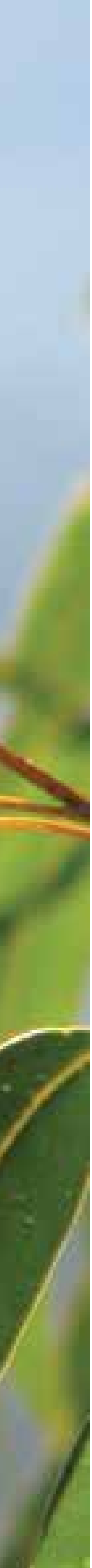
WEED

Name	Albizia or Cape Wattle *(Paraserianthes lophantha)*
Family	Fabaceae
Habit	Evergreen shrub or small tree.
Habitat	Garden escape. Can become dominant in bushland and coastal woodland.
Leaves	Are compound with numerous small leaflets similar to some wattles *(Acacias)*.
Flowers	Greenish yellow or cream bottle brush-like flower clusters.
Fruit/seed	Dark seed pods up to 10cm in length.
Origin	Western Australia (has become naturalised in eastern Australia invading bushland).

DISTINCTIVE FEATURES

Cape Wattle can be distinguished from the native by its bottlebrush-like flowers, the Sunshine Wattle having small globular flowers.

WEED REMOVAL



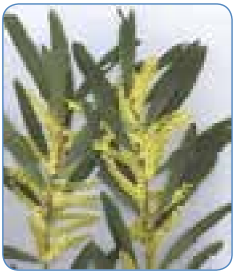
SYDNEY GOLDEN WATTLE
AND GOLDEN WREATH WATTLE

NATIVE

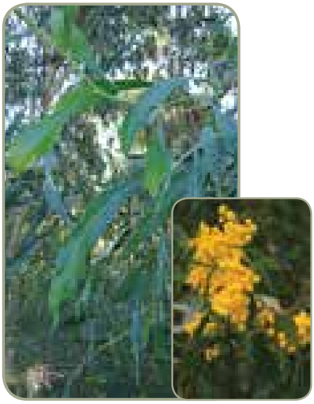
Name	Sydney Golden Wattle *(Acacia longifolia subsp. longifolia)*
Family	Fabaceae
Habit	Is an erect or spreading tree growing from 1 to 8m high.
Habitat	Musually found on sandstone-derived soils in drier communities.
Leaves	As with all Acacias, what appear to be leaves on the plant are in fact modified 'phyllodes' or leaf-stems. Phyllodes of the subspecies longifolia are usually 6 -20 cm long with 2, 3 or more prominent longitudinal veins.
Flowers	Grow in cylindrical formations and as the name suggests are bright yellow in colour.
Fruit/seed	Long narrow drooping seed pods.

WEED

Name	Golden Wreath Wattle *(Acacia saligna)*
Family	Fabaceae
Habit	Highly adaptable, fast growing shrub.
Habitat	Thrives in a range of habitats and is tolerant of poor soils and low rainfall.
Leaves	Its phyllodes resemble those of the Sydney Golden Wattle however the Golden Wreath Wattle has a waxy surface that can be rubbed off, giving the plant a bluish look, and wavy leaf margins. Has a single prominent mid-vein and feather-like lateral veins.
Flowers	Globular flower heads.
Fruit/seed	Pods can be straight or curved.
Origin	Western Australia (was introduced to the Sydney region and has become a weed in many coastal bushland areas, especially along roadsides).



Native Sydney Golden Wattle

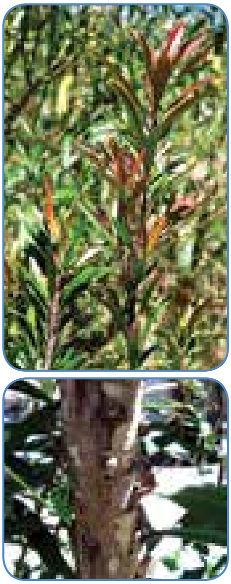


Weed Golden Wreath Wattle

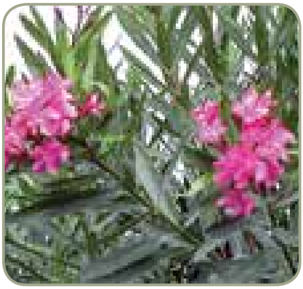
DISTINCTIVE FEATURES

The Sydney Golden Wattle can be confused with the Golden Wreath Wattle due to their similar leaf shapes, general appearance and growing locations. Despite the phyllodes of the Golden Wreath Wattle resembling those of the Sydney Golden Wattle, there are a couple of distinguishing features. The Golden Wreath Wattle often has a waxy surface that can be rubbed off, giving the plant a bluish look, and wavy leaf margins and leaves much longer than the Sydney Golden Wattle. A single prominent mid-vein differs from the 2, 3 or more in the native. The weed also has lateral veins that are feather-like in their placement, whereas the native veins all run parallel. Another distinguishing feature is the flower heads. Although similar in colour, the Western Australian plant has globular flower heads, unlike the cylindrical ones of the Sydney native species. Like most Acacias the seeds are carried around by ants and germinate profusely after a fire.

WEED REMOVAL



Native Water Gum



Weed Oleander

WATER GUM
AND OLEANDER

NATIVE

Name	Water Gum *(Tristaniopsis laurina)*
Family	Myrtaceae
Habit	Small spreading tree growing to around 10m.
Habitat	Commonly along creek banks and sheltered gullies, often growing alongside Coachwood (*Ceratopetalum apetalum)* and Black Wattles *(Callicoma serratifolia).*
Leaves	Has handsome foliage often with red young leaves and distinctive pale, bare and sheen bark when young, reminiscent of the Crepe Myrtle, and which frequently becomes scaly and blotchy when older.
Flowers	Dense, leafy bundles of yellow flowers appear from December to February.
Fruit/seed	Woody capsules 6-8mm in diameter.

WEED

Name	Oleander *(Nerium oleander)*
Family	Apocynaceae
Habit	Shrub, usually growing to about 6m, with many branches arising from near the ground.
Habitat	Thrives in warm moist locations but once established is tolerant of very dry conditions.
Leaves	Whorled on the stem, and when broken exude a milky white sap.
Flowers	Can be white, pink, red, or yellow.
Fruit/seed	Long narrow capsule which when mature releases many downy seeds.
Origin	Mediterranean region

DISTINCTIVE FEATURES

The Water Gum's lance-shaped leaves appear somewhat similar in shape, size and texture to those of the Oleander, although they are not as stiff and leathery, and are alternately placed along the stem. The Water Gum is commonly used as a street tree in suburbs around Sydney. Oleander is a garden ornamental that has also been used as a street tree and may be mistaken for the native Water Gum if growing in suburban bushland.

WEED REMOVAL

Due to their toxicity, care should be taken when removing Oleanders. Dust masks, protective goggles, gloves and long sleeves should be worn. Ideally, this should be done during the growing season, and may have little effect during winter. WARNING! This plant is very poisonous to humans.

WEED REMOVAL TECHNIQUE

HAND-WEEDING

This is a common method of weed removal. It is essentially pulling out weeds, roots and all, by hand. Gloves and long sleeved shirts should be worn to guard against sharp debris in the soil, or allergic reactions to the weed material. A trowel or boning knife can also help to loosen the soil while hand weeding to ease roots out of soil intact.

SEED HEAD REMOVAL

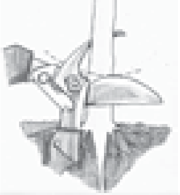
Ensures that the plant will not be able to reproduce. All seeds should be bagged and disposed of via an appropriate green waste system. Care should be taken not to spread seed, whilst attempting removal. When you are using secateurs it is also important to cut away from yourself and to wear gloves to reduce injury.

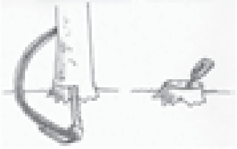
SCRAPE AND PAINT

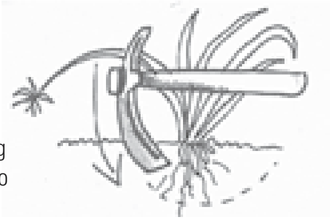
This technique is commonly used on vines or woody weeds with an extensive root system (such as Ochna or Blackberry). Use a moderately sharp knife and lightly scrape from the stem base up to either the first branch or 10-15 cm up the main stem. Start the scrape as close to the root base as possible. Immediately after scraping apply neat glyphosate onto the scraped surface, either using a brush or applicator bottle. This allows more herbicide to enter the plant than if you used the cut and paint method. If a stem is thicker than 3 cm scrape and paint both sides of it. When you are using herbicide wear PVC coated gloves to protect against contamination, and while scraping to protect against knife injury.

CUT AND PAINT

This is a technique used to remove woody weeds. Cut as low and as flat to the ground as possible with a secateurs or saw (depending on the size of the plant trunk). Make sure that the cut is flat (horizontal) so that when herbicide is applied it will not run off. A cut at a sharp angle could also be a hazard. Apply the herbicide evenly either using a brush/applicator bottle and follow up quickly after cutting the stem for best penetration of the herbicide into plant system.







MATTOCKING

Mattocking out weeds with thick or tuberous roots can also be used as an alternative to herbicide. This is an effective way of removing Chlorophytum, Asparagus fern, thick grasses, Ginger Lily and other similar weeds. Safety glasses should be worn due to flying dirt that could get in your eyes. Be aware that varieties of spiders tend to hide in root bases so gloves should be worn. Care should also be taken while swinging a mattock when there are others nearby. A short handled mattock is best.

CROWNING

Crowning is another way that weeds with tough root systems or rhizomes can be removed. Using a moderately sharp knife and with a circular motion cut into the soil and roots around the root base. Care should be taken while using a sharp knife so wear gloves. Do not leave your knife 'lying around' when it is not being used but place it back into your pouch. Also remember your knife is not a lever. A levered knife will usually break.

BIOLOGICAL CONTROL

Involves the introduction of a predator to the environment after rigorous scientific testing. The biological control is often an insect or fungus or other organism that feeds on the weed resulting in dieback or death of the plant.

SKIRTING

A bush regeneration term describing the action of cutting away vines growing over trees/shrubs. Skirting kills the top of the vine and allows light in to the plant that was being smothered.

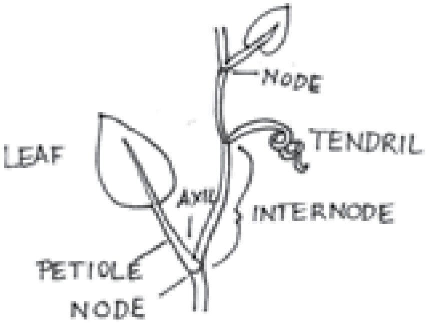
HERBICIDE USE

Always use herbicides such as glyphosate according to product label directions. Be familiar with the Safety Data Sheet and correct usage for the product. This booklet has referred to herbicide use including spraying. When considering spraying, always be mindful of habitat and proximity to creeks, rivers and water bodies that fauna inhabit. We have not included rates or detailed descriptions of herbicides application in this booklet deliberately as Council is not an authority to provide this information and many weeds require off- label permits. It is also subject to change and out-date.

Volunteers of the Hornsby Shire Council Bushcare program are not permitted to spray herbicide at any Council managed Bushcare site due to the regulatory requirements of the *Pesticide Act* and certification required under that Act.

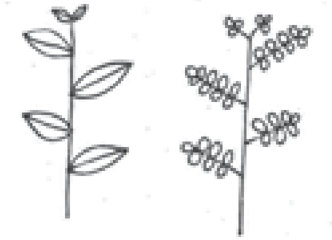
GLOSSARY

BASIC LEAF STRUCTURE:



ALTERNATE LEAVES:

(showing simple and compound leaf structures)



ANNUAL:

A plant that grows from seed, matures and sets seed then dies in one year.

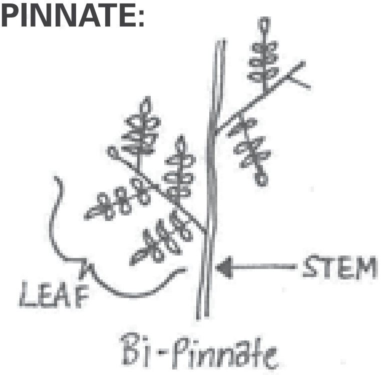
BERRY:

Fruit that has one or more seeds surrounded by soft flesh.

BIENNIAL:

A plant that grows from seed, matures and sets seed then dies in less than 2 years.

BI-PINNATE:



CAPSULE:

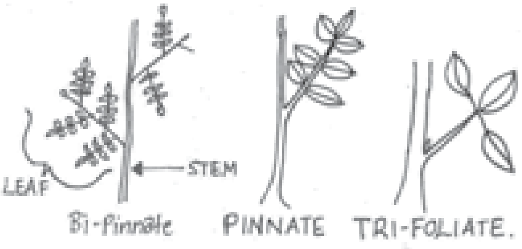
Part of the fruit enclosing the seed.

COLONISER:

The first plant to emerge as a seedling in disturbed areas (i.e. in landslides, where a tree has fallen over or human land clearing that has increased the amount of sunlight reaching the ground surface).

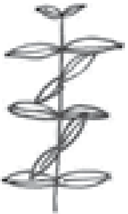
COMPOUND LEAVES:

A ‘leaf” comprising of several ‘leaflets’.



DECUSSATE:

Describes leaves that are arranged opposite on the stem but at right angles to the pair of leaves above.



DISCOLOUROUS:

Being of one colour on the top surface and another colour on the under surface.

ERADICATE:

To remove and destroy.

FROND:

Leaf structure of a fern.

LENTICELS:

Small breathing holes up the stems of some plants.

MONOCULTURE:

A plantation, or large area of plants that has only one species growing in it.

NODES:

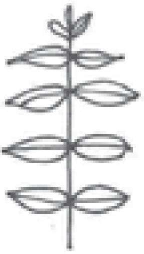
A portion of a stem where a leaf, root or bract (leaf like structure) arises.

ODOROUS:

Having a smell.

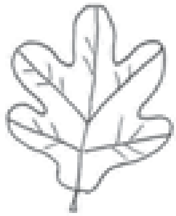
OPPOSITE LEAVES:

Leaves that are arranged at the same level but on opposite sides of the stem.



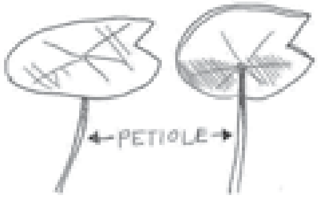
PALMATE:

Compound leaf with 3 or more leaflets arising from the one point at the top of the petiole.



PETIOLE:

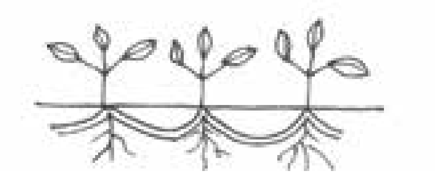
A small stem or stalk that connects the leaf to the main plant stem/trunk.



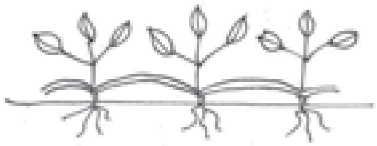
PERENNIAL:
A plant that persists for 3 or more years.

POD:
A seed capsule that is long and dries out to reveal a row of seed inside.

RHIZOME:
An underground stem.

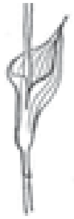


RUNNER:
A slender prostrate stem, having a bud at the end, which sends out, leaves and roots also referred to as a stolon.



SCLEROPHYLL:
Plants that are adapted to drier areas, these types of plants generally have features such as oil glands, thick leaves, reduced leaves and more to prevent water loss.

SHEATH:
A long tubular structure either entire or split down one side of a leaf blade.



SKIRTING:
A bush regeneration term describing the action of cutting away vines growing over trees/shrubs. Skirting kills the top of the vine and allows light in to the plant that was being smothered.

STOLON: A lateral stem growing above ground and which roots at its nodes, commonly known as a runner.

SURFACTANT: A spreading or wetting agent that is added to herbicide to maximise herbicide contact to leaves.

TERMINAL: At the end, at the tip of.

TUBER: An underground swollen stem containing food reserves.

TRIFOLIATE: Having 3 leaflets.

TRI-VEINED:
Having three approximately longitudinal main veins

UNDERSTOREY:
A plant in a forest/woodland system that is below the canopy. This can be a shrub, grass, sedge or small tree.

VEGETATIVE REPRODUCTION:
Being able to grow from a portion/small part of the plant without seed.

HORNSBY ONLINE HERBARIUM

The Hornsby Online herbarium is a useful resource for anyone wanting to identify plants in the Hornsby Shire, or Sydney region.

It catalogues hundreds of native plants (and many weeds) found in Hornsby Shire, and is a database allowing users to search images and information for plant identification purposes.
It is highly recommended for volunteers/bush regenerators to use as a valuable resource, to learn plants in individual Bushcare sites, you could even download images of species at your site as you find them, print them up and make a site specific reference book! Go onto the Herbarium website now, and test it for yourself!

The Hornsby Online Herbarium is accessed through **hornsby.nsw.gov.au**

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ACKNOWLEDGEMENTS:
Special thanks to Lyndel Wilson for her initiative in bringing this field guide to fruition.
All illustrations by Lyndel Wilson.

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For more information visit
hornsby.nsw.gov.au/bushcare